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February 1992

Agricultural Income and Finance

Situation and Outlook Report

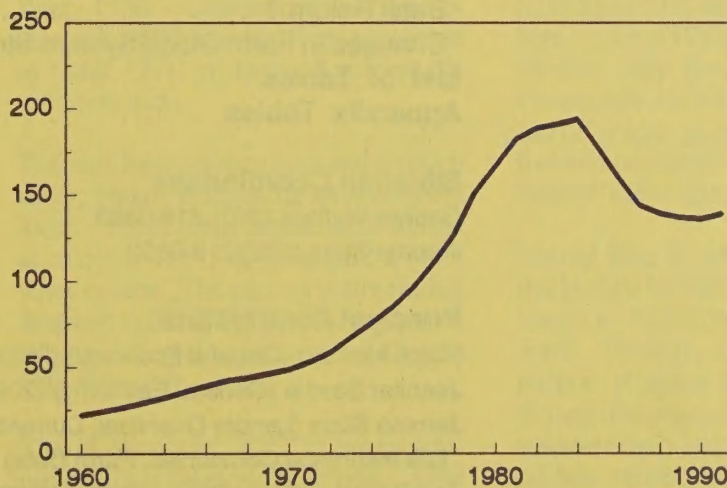
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Total Farm Debt Increasing Modestly

\$ billion



Agricultural Income and Finance Situation and Outlook. Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture, February 1992, AFO-44.

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Summary

Financial institutions serving agriculture continued to experience improved financial conditions in 1991. Total farm debt (excluding households) at yearend 1991 is estimated at \$139.3 billion, up 2 percent from a year earlier, but 28 percent below the 1984 peak of \$193.8 billion. Commercial banks accounted for more than 69 percent of the estimated \$2.8-billion increase in farm lending in 1991. Banks and life insurance companies each posted a 4-percent increase in their farm loan portfolios.

The delinquent share of loan portfolios was largely steady at mid-1991. Commercial banks and the Farm Credit System (FCS) experienced small seasonal increases from yearend 1990, but commercial lender loan delinquency rates were relatively low. The Farmers Home Administration (FmHA) loan delinquency rate decreased from 37 percent at midyear 1990 to 33 percent a year later. Loan chargeoffs were negligible for both FCS and farm banks, and the sizable FmHA chargeoffs slowed in fiscal 1991 while new regulations were being developed.

Farmers remain careful about acquiring additional debt. Farm income declined in 1991, but adjustments during 1987-90 made farmers and lenders much better able to handle financial difficulty. Yet all lender categories report that agricultural credit demand was not particularly strong in 1991, while the capacity to lend remained high. Lower net farm income in 1992 and modest farm asset growth portend minimal increases in real estate and nonreal estate farm borrowing. Total farm debt is expected to increase 1 to 2 percent in 1992.

Agricultural interest rates on new loans declined about 100 basis points in 1991, and are expected to show a similar decline in 1992. Interest rates on nonreal estate loans averaged 9.8 percent for commercial banks and 10.3 percent for the FCS in 1991. Average real estate loan rates averaged 9.7 percent at life insurance companies and 9.9 percent for the FCS. Commercial agricultural lenders indicate they would like to make more new high-quality loans, but competition for these loans remains keen.

Farm banks now are among the strongest institutions in the banking system. Annualized mid-1991 results indicate a return on assets of 1.1 percent at farm banks, well above the low of 0.4 percent in 1986 and the current industry average of 0.6 percent. Loan-to-deposit ratios were 56 percent at midyear 1991, up 1 percent from a year earlier, but they still showed ability of farm banks to extend additional credit. Only 2.2 percent of farm bank loans were nonperforming at mid-1991 and chargeoffs of farm non-real estate loans were only 0.1 percent of all such loans through mid-1991.

Farm banks' return on equity at midyear was 11.4 percent, compared with small nonagricultural banks at 10.4 percent. Farm banks also were more highly capitalized with a capital-to-asset ratio of 10.2 percent, compared with 9.1 percent at other small banks. The number of farm bank failures—10 in 1991—indicates a general absence of serious financial problems among farm banks.

Direct FmHA lending during fiscal 1991 was \$633.7 million, down \$287.6 million from the previous year and the lowest since 1970. Outstanding principal on direct farm loans declined \$2.1 billion from mid-1990 to mid-1991. The decline was due to reduced new lending volume, loan restructuring, and loan writeoffs. Total outstanding direct loans of \$17.8 billion was the lowest since 1980. Guaranteed lending accounted for 69 percent of the new loans in fiscal 1991, up from 58 percent the previous year.

Through loan restructuring and foreclosures, FmHA is reducing its delinquent loans. These loans totaled \$5.8 billion at midyear 1991, down a third from 3 years earlier. The pace of restructuring declined in fiscal 1991 because of pending regulatory changes mandated by the 1990 farm bill.

The FCS entered 1992 in an increasingly strong financial condition. After suffering substantial losses in loan volume during 1983-87, the FCS portfolio has stabilized at roughly \$50 billion, while its share of the farm loan market is about 25 percent. FCS earnings qual-

ity steadily improved as its loan portfolio stabilized and the farm sector recovery progressed. Capital levels have been restored. Nonperforming assets, though still unacceptably high, continue to work their way through the portfolio. The FCS is dealing with the difficult problem of improving overall cost efficiency, but weaknesses in the cooperative and sector-specific nature of the system remain to be addressed. FCS performance by district varies, but districts that had previously received financial assistance are performing well.

Life insurance company farm loan portfolios continue to improve. Loan delinquencies and foreclosures are the lowest since the early 1980's. This year, life insurance companies will have opportunities to make profitable farm mortgage loans, but the competition for better-quality loans remains keen.

Farmer Mac finally guaranteed its first loan pool in December 1991. The long-awaited start-up of the Farmer Mac I market has been stymied by structural and economic factors, such as excess lending capacity and the complexity of the Farmer Mac format. New legislation in 1991 gave Farmer Mac the explicit authority to purchase senior securities or obligations backed by qualified loan pools with funds raised through the sale of its own securities. While Farmer Mac has passed its first hurdle, its influence on agricultural credit markets remains slight and is expected to develop only slowly. Ultimately, the Farmer Mac market must demonstrate it can offer loan products that are innovative and competitive with those offered through other sources.

Farmer Mac II, which involves securities backed by FmHA-guaranteed loans, issued its first offering of \$1 million in April. Through the end of 1991, \$10.8 million in loans had been securitized through the secondary loan market. The volume of guaranteed loans sold into the market should grow slowly in 1992. Many of the same factors slowing development of Farmer Mac I also will affect the Farmer Mac II market.

Recession Continues Through 1991

Falling interest rates and oil prices provide some relief for agriculture.

The recession that began in July 1990 continued through 1991. Although the economy began to pick up in the spring, the recovery stalled toward the end of the year. Inflation was modest and interest rates fell in 1991. Most forecasters are predicting a recovery for 1992, with little change expected in inflation or interest rates.

Production Sluggish, Unemployment Rises

The recession deepened in early 1991. The Department of Commerce's Coincident Index, which measures real economic growth on a monthly basis, declined sharply in early 1991, but began to rise in the spring. The increases prompted analysts to suggest that the recession had ended in March or April and a recovery was underway. Industrial production, a component of the index, rose 5.4 percent at an annual rate in the second quarter. Other indicators confirmed the turn. For example, after growing quickly in the first quarter, the unemployment rate stabilized in the second quarter.

The second-quarter gains were short-lived, however. The Coincident Index stopped rising in the early fall, and fell below its previous low for this recession (March 1991) by the end of the year. Likewise, the unemployment rate resumed a slow climb, and in December, reached its highest level for the recession.

Consumer spending was sluggish during 1991, falling for the first time since 1980. Inflation-adjusted, per capita consumer income fell for the year, the primary reason behind stagnant consumer spending. Consumer confidence, which many analysts believe also has a significant effect on spending, rose dramatically after the Persian Gulf War, but fell back to its lowest level in more

than a decade in the last few months of 1991.

Inflation Drops Substantially

Weak overall demand and crude oil price declines following the Persian Gulf War reduced inflation substantially in 1991. Crude oil prices fell more than a third early in the year, resulting in a 7.4-percent drop in consumer energy prices for 1991. Food prices registered their smallest increase since 1976. Excluding food and energy, consumer prices rose 4.4 percent during 1991, down from 5.2 percent in 1990. Consumer prices excluding food and energy often indicate underlying inflation pressures, which reflect overall demand conditions rather than unusual commodity price movements.

Interest Rates Slide

With inflation under control and the economy sluggish, the Federal Reserve aggressively reduced interest rates during 1991, especially in the second half of the year. The Federal funds rate—the rate banks charge each other for overnight lending—was cut by about half during the year, ending at the lowest level in nearly 20 years. Bank prime rates followed the Federal funds rate slowly, ending the year at 6.5 percent.

While short-term rates fell sharply, longer-term rates did not fall as much. In general, longer-term rates reflect assessments of real growth and inflation prospects over an extended period. The widening spread between short- and long-term rates may have reflected expectations that the recession would be relatively short and mild, and only temporarily reduce inflation. Despite only partially incorporating short-term interest rate declines, long-term rates had fallen to the levels of the late 1970's by the end of 1991.

Moderate Recovery Expected

Falling interest rates throughout 1991 point to economic recovery during 1992. Most analysts believe this recovery will be slower than the typical recovery, principally because consumer and business income gains are expected to be used to reduce relatively high debt burdens, rather than to increase current consumption or investment. Growth in real gross domestic product is expected to average below 2 percent for 1992. With relatively low growth, low rates of industrial capacity use, and high unemployment rates, inflation is likely to remain around 3.5 percent. Interest rates are likely to be little changed from 1991's yearend levels, although a stronger recovery would tend to push rates up.

The outlook has several areas of uncertainty, chief among which is the fiscal policy outlook. While tax cuts or spending increases would tend to stimulate the economy in the short run, some analysts suggest that such actions might cause financial market participants to raise their expectations of longer-term inflation. This would raise long-term interest rates and offset some of the fiscal stimulus. Other analysts suggest that, with considerable excess capacity and unemployment, a fiscal policy change would have little impact on inflation.

Implications for Agriculture

Although the agricultural sector will probably face weak overall demand, low interest rates and inflation rates will tend to reduce pressure on farm expenses. In addition, because interest rates are likely to remain low relative to those in other countries, the exchange rate is not likely to rise substantially, enabling U.S. agricultural exports to remain competitive in foreign markets.

The recession continued in 1991, marked by sluggish industrial production and rising unemployment. Inflation remained low and interest rates dropped significantly throughout the year. However, while short-term rates, including the prime rate, fell sharply, long-term rates did not fall as much.

Figure 1
Coincident Index
1982=100

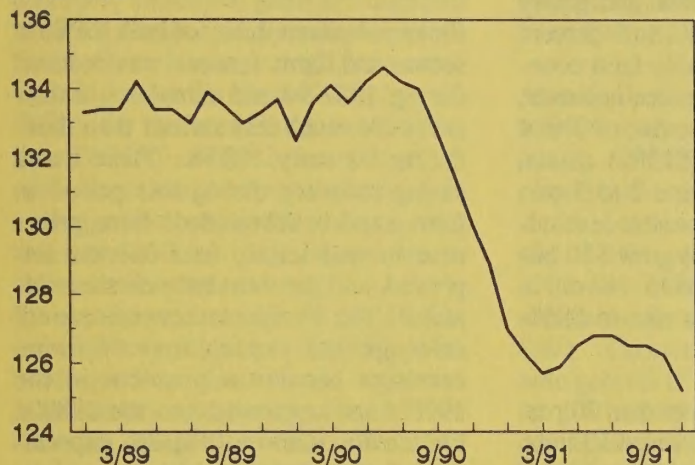


Figure 2
Inflation-Consumer Price Index
% change from previous year

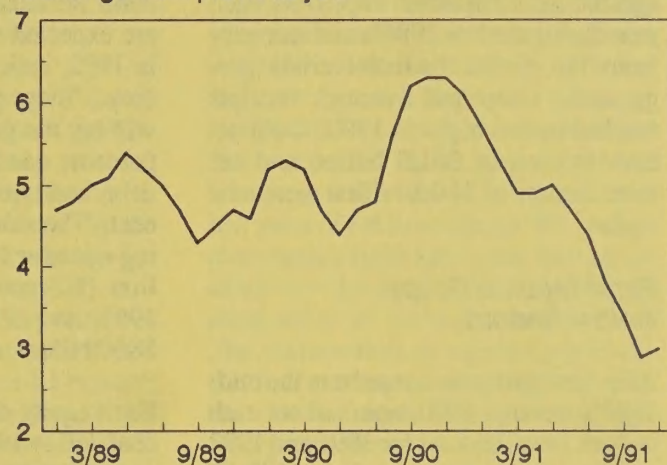


Figure 3
Treasury Bill and Bond Yields
Percent

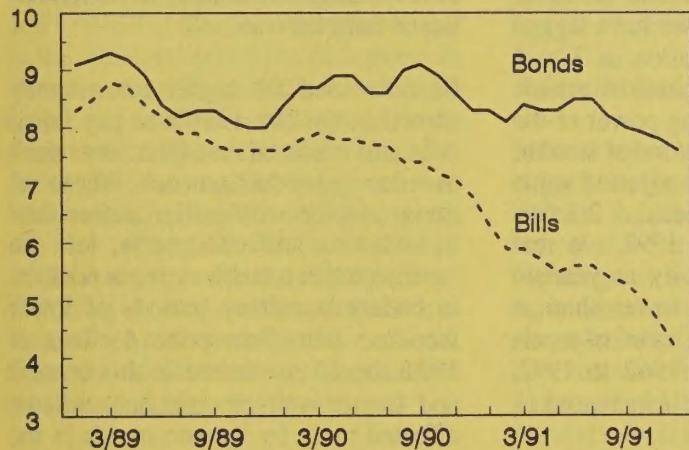


Figure 4
Prime Rate
Percent

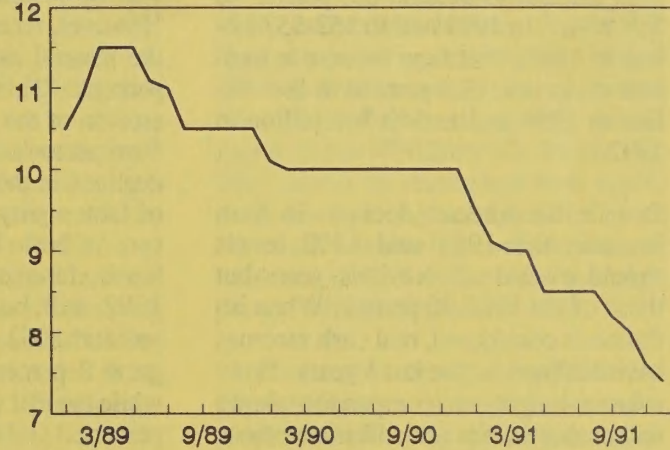


Figure 5
Industrial Production
% change from previous year

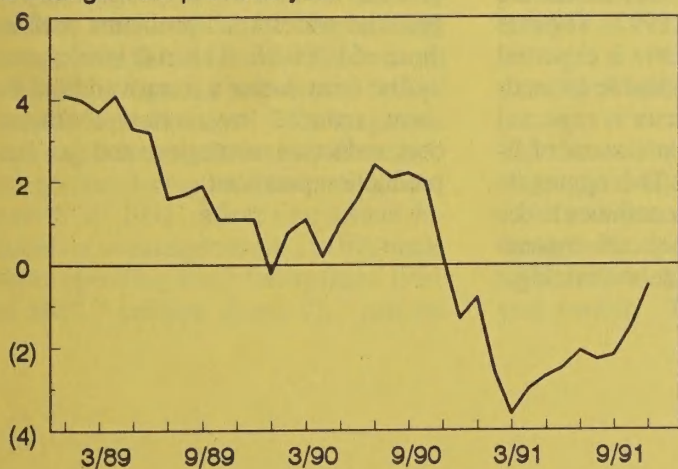
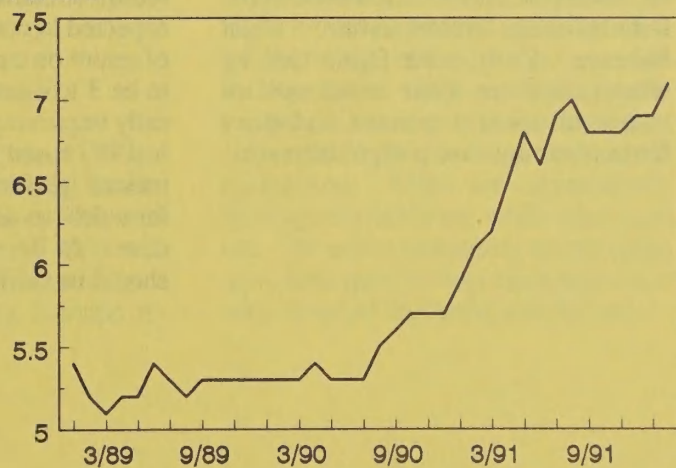


Figure 6
Civilian Unemployment Rate
Percent



Despite Changes, Fundamentals Remain Strong

Farm income declined in 1991, but adjustments during 1987-90 created a sector much better able to handle adversity.

Lenders have benefited from changes in the farm sector in recent years. U.S. agriculture's finances improved each year during the late 1980's as a recovery from the earlier financial crisis progressed. Crop and livestock receipts reached record highs in 1990. Both net cash income of \$61.8 billion and net farm income of \$50.8 billion were new highs.

Farm Income Drops Below Record

After increasing each year from the mid-1980's through 1990, nominal net cash and net farm incomes for 1991 and 1992 are forecast to return to their 1988-89 levels. Lower livestock receipts, lower Government payments (1991), and continued expense increases will cause net cash income to decline 6.2 percent to \$58 billion in 1991 and to \$52-\$57 billion in 1992. Net farm income is forecast to decline 13.4 percent to \$44 billion in 1991 and to \$40-\$46 billion in 1992.

Despite the forecast declines in farm income, the 1991 and 1992 levels should exceed all previous years but those of the 1988-90 period. When inflation is considered, real cash incomes have declined for the last 4 years. However, a longer-run comparison shows real cash incomes are still above those of the early 1980's and on the same trend since the 1950's. For 1992, nominal net cash incomes are forecast down 4 percent for crop farms and 6 percent for livestock farms. However, some farm types are forecast to have a slight increase. Cash grain farms (led by wheat) could see a rise in net cash incomes of about 1 percent and dairy farms also may have a slight increase.

Limited Balance Sheet Growth

Farm business assets, debt, and equity are expected to increase 1 to 2 percent in 1992, indicating a stable farm economy. These projected gains, however, will lag the general price rise of 3 to 4 percent, causing real (1982) assets, debt, and equity to decline 2 to 3 percent. The value of farm assets (excluding operator households) grew \$10 billion (1.2 percent) to \$845 billion in 1991, and is forecast to rise to \$850-\$860 billion in 1992.

Farm equity declined more than 30 percent during 1980-86, increased 10 and 6 percent, respectively, in 1987 and 1988, and has grown 1 to 3 percent annually since. Some 60 percent of the decline in nominal equity value during 1980-86 will be restored by the end of 1992. However, recent increases have lagged the general rate of inflation of 3 to 4 percent. This has resulted in a slow erosion of the purchasing power of the farm sector's primary store of wealth; declines in the inflation-adjusted value of farm equity are projected at 2.5 percent in both 1991 and 1992. In real terms, farm sector equity at yearend 1992 will be slightly lower than at yearend 1962. The real value of assets grew 2 percent during 1962 to 1992, while the real value of debt increased 17 percent.

Despite the erosion of farm equity, the farm sector is showing signs of continued recovery. Relatively high rates of return on farm equity and assets are expected to continue in 1992. The rate of return on current income is expected to be 3 to 4 percent. A stable to modestly improving farm sector is expected in 1992 based on other measures of financial performance. The aggregate farm debt-to-asset ratio continues to decline. At the same time, cash income should be sufficient for debt servicing.

Farm Sector Better Able To Withstand Adversity

Financial vulnerability of both the farm sector and farm lenders was reduced during 1987-90 and remaining imbalances are much less serious than those during the early 1980's. There was a strong recovery during this period as farm exports rebounded, farm prices rose in real terms, farm income improved, and the farm balance sheet adjusted. The divergence between current earnings and expectations of future earnings became a problem in the 1970's and continued into the 1980's. Eventually, during 1981-86, expectations demonstrated in the balance sheet were better adjusted with annual earnings. This change was performed through a decline in asset values and debt holdings followed by a strengthening of farm income.

Farmers used the higher returns they earned in the late 1980's to pay down debt and made other adjustments such as reducing production costs. These actions, coupled with earlier sizable loan writedowns and chargeoffs, left the farm sector in a much stronger position to endure transitory periods of lower income. The farm price declines of 1991 should be viewed in this context and farmer welfare ultimately will be affected more by income trends in the longer term. Lower prices in 1991 may create hardship for some farmers, particularly those in areas experiencing adverse weather. But an extended period of weak income would be necessary to generate widespread problems such as those of 1981-86. This risk is mitigated by the farm sector's improved balance sheet, reduced inventories, continued cost reduction strategies, and prudent production practices.

Improvement Continues in 1991

Farm lenders' portfolios benefit from their careful management and the sustained recovery of the farm sector during 1987-90.

The financial condition of agricultural lenders continued to improve in 1991, and some additional gains are expected in 1992. Each of the four major institutional farm lender categories—commercial banks, the Farm Credit System (FCS), the Farmers Home Administration (FmHA), and life insurance companies—faces unique challenges, but is in a stronger financial position than during the mid-1980's. Most borrowers remain cautious about taking on new debt for expansion; farm debt is expected to increase only 1-2 percent in 1992. With moderate loan demand and improved loan portfolios, agricultural lenders are focusing competitive efforts on maintaining or increasing market share.

Lenders Strengthen Position

The position of agricultural lenders in 1991 reflected the overall improvement in the financial condition of farmers in recent years. Except for the FmHA, all major institutional lender groups continue to experience lower delinquencies, fewer foreclosures, declining net loan chargeoffs, and far less loan restructuring than in the mid-1980's. Although improvement continues, the pace of working down delinquencies has slowed. As financial stress declined, financial indicators have approached more normal historical levels.

Demand for Credit Is Moderate

All lender categories report that demand for agricultural credit was not particularly strong in 1991, while the capacity to lend remained high. Agricultural commercial banks continue to have ample lending capacity as indicated by low loan-to-deposit ratios. FCS long-term real estate loans outstanding decreased 0.6 percent during the year ending September 30, 1991, reflecting constant demand for mortgage credit. FmHA made direct operating loans during fiscal 1991 of \$489.9 million, down 33.2 percent

from fiscal 1990. Total FmHA direct obligations (operating, ownership, emergency) fell 31.2 percent in 1991 from 1990 to \$633.7 billion.

Among life insurance companies still actively pursuing agricultural investments, total lending activity rose 4.1 percent during 1991. Despite the increase, outstanding loan volume by the end of 1991 was 17.8 percent below the 1981 peak. Total loan volume of commercial banks and the FCS increased in 1991. Commercial banks posted volume gains of \$1.9 billion, or 4.1 percent, for 1991. The FCS reported total loans outstanding of \$51.3 billion on September 30, 1991, 0.3 percent above a year earlier. FmHA total lending increased roughly 2 percent in 1991, but total farm loans outstanding at yearend were 30.0 percent (\$7.4 billion) below the volume reported in 1985.

Farm Interest Rates Decline

Interest rates on farm loans declined slightly in 1991 among the major agricultural lenders, with an overall decrease of some 100 basis points. Varying degrees of competition in local agricultural credit markets and the wide variety of available loan products, however, resulted in a wide variation in interest rates for farm loans. The average interest rate on all outstanding farm debt declined from 10.96 percent in 1982 to an estimated 9.7 percent in 1991, and is forecast to drop 20-30 basis points in 1992. Total farm sector interest expenses are forecast to be relatively unchanged in 1992.

Lender Health Improves

The financial health of the FCS and commercial agricultural banks continues to improve. FCS net income through the third quarter of 1991 was \$624 million, up 37.1 percent from a year earlier. The strong increase re-

flects record margins between interest rates earned and interest rates paid. In contrast to other recent years, provisions were made, rather than reversed, for future loan losses. Together, these factors indicate greatly improved earnings quality for the system. Agricultural banks reported higher average returns on equity and assets in 1991, and very low rates of net loan chargeoffs. Moreover, agricultural bank loan loss provisions were lower in 1991, reflecting an expectation of lower future loss rates. The performance of agricultural banks continues to approach conditions common before farm financial problems emerged in the early 1980's.

FmHA continues to work aggressively through its backlog of delinquent direct loans. Delinquent loans at mid-1991 were down 13.4 percent from the previous year to \$5.8 billion. The rate of loan restructuring declined in fiscal 1991 as FmHA prepared new regulations regarding restructuring in response to the 1990 farm bill. FmHA has been unable to restructure new applicants since passage of this bill. However, cumulative loan writedowns and writeoffs of \$2.9 billion had been approved through September 1991.

Lenders report strong competition for high-quality farm loans. Loan-to-deposit ratios inched up to 56.3 percent for agricultural banks in the year ending June 30, 1991, but surveys of bankers still indicate the ratios are below desired levels. The loan-to-deposit ratio has increased from a low of 53.4 percent in 1987, but the current ratio remains much below the high of 68.2 percent recorded in September 1968. Life insurance companies continue to exhibit considerable variation in loan policies toward agriculture. Some are aggressively seeking new business, while others are not. The active companies are pursuing new, high-quality farm mortgages in a wide range of situations and regions.

Cautious Optimism Overall for 1992

Farm lenders will be entering 1992 in a guardedly optimistic mood. Farmer Mac moves forward.

Lenders enter 1992 facing a farm sector in generally solid financial condition. Farm income declined in 1991, but for the majority of farmers, 1987-90 can be considered a period of sustained recovery from financial difficulties of the early and mid-1980's. Gross income outpaced rising expenses, despite sizable reductions in Government support. The 1988 drought year was followed by 2 years of rebounding average net incomes. Farm businesses generally were in a stronger position to service debt at the end of 1990 than at any time in a number of years.

The outlook is for limited to moderate growth in the overall farm economy in 1992. While it appears that some farmers will make little financial progress, most will be able to avoid major setbacks. Several projected performance indicators show a moderate overall rate of growth. This continuing healthy level of farm income is likely to contribute to nominal growth in farm sector wealth. While most farm income measures will not reach their 1990 highs, they are still relatively high by historical standards and will support a balance sheet with 1- to 2-percent increases in assets and debt in 1992.

Regional Variations Important

Significant regional differences will face farmers and lenders in 1992. Net cash incomes are forecast down 4 percent for crop farms and 6 percent for livestock farms, but some farm types are expected to experience a slight increase. Net cash incomes are forecast to decrease just under 6 percent in the Midwest. The decreases will range from 4 to 5 percent in the Northeast, Southeast,

and West, but income will decline less than 1 percent in the South Central region where cotton is important and wheat and rice also are factors. Cash grain farms could see net cash incomes increase about 1 percent in 1992 with wheat receipts leading the way. Hog receipts are forecast down 6 to 8 percent, and the Midwest could see livestock receipts down about 8 percent.

About 7 percent of farms entered 1991 in a vulnerable financial position with a relatively large amount of debt and with negative net farm income. Since 1987, the geographic locations and production specialties associated with financially vulnerable farms have undergone considerable change. In 1992 the prospects for relatively low dairy receipts will adversely affect operations that did not benefit from relatively high prices in 1989 and 1990. The cumulative effects are most likely to be felt in the Northeast, Lake States, Corn Belt, and Southern Plains. Reduced income prospects for the hog sector will likely result in more geographically dispersed financial difficulties. High demand for feed and strong prices should continue the trend toward fewer vulnerable cash grain farms.

Cautious Approach Predominates

Farm borrowing is not expected to increase significantly in 1992 because of the drop in farm income. During the last half of the 1980's, farm debt declined about \$60 billion. Farmers and lenders learned lessons from the financial stress of the 1980's and are reluctant to respond to the short-term opportunities

with rapid renewed debt expansion and by building up asset volume.

Through the mid-1990's and the life of the current farm legislation, economists expect the major farm income indicators to improve in nominal terms. Nominal net cash incomes are expected to rise moderately given the general increases expected for receipts and slight gains in expenses. Net farm incomes, including noncash components of income and expenses, could rise a bit faster. In real terms, net cash and net farm incomes would be increasing only slightly. These expected trends are unlikely to spark a rapid increase in the use of credit.

Farmer Mac Moves Forward

Farmer Mac I, the secondary market for farm real estate and rural housing mortgages, began operation in December 1991 with a \$112-million real estate pool. The new market has been stymied for 2 years by a host of structural and economic challenges, including weak demand for fixed rate financing and a high degree of liquidity among agricultural lenders.

Yet, Farmer Mac's prospects for 1992 look brighter due to legislation passed late in 1991 that altered the operating structure of the market. By yearend, Farmer Mac had certified five institutions to act as Farmer Mac poolers. Farmer Mac II, the secondary market for FmHA-guaranteed loans, also began operating in 1991. Despite the introduction of an attractive loan pricing method for participating lenders, sales of guaranteed loans into the market have been limited.

Farm Credit Access Ample for 1992

Total farm debt should increase in 1992. Demand for farm loans continues to be modest.

Despite lower net farm incomes in 1992 and modest farm asset growth, farm borrowing is not forecast to rise substantially. U.S. farm assets (excluding operator households) rose \$10.4 billion (1.3 percent) in 1991 and are expected to rise about 1.2 percent in 1992 to \$850-\$860 billion. These modest changes suggest a stable farm economy in terms of nominal dollars. But the real value of farm assets is projected to decline in 1992 as the general inflation rate is expected to exceed the growth rate in asset values.

Farm Debt Increasing

Total farm debt should increase 1-2 percent in 1992. This will be the second annual increase after 6 successive years of net debt retirement. Total loan volume for commercial banks, life insurance companies, and FmHA increased during the last year. Commercial banks experienced a 5.6-percent increase in real estate lending in 1991, marking the tenth consecutive year of gains in this category. Some of the increase is due to continued stringent loan collateral requirements implemented during the farm financial crisis of the mid-1980's. There also has been increased use of revolving lines of credit backed by real estate.

Activity in the land market should create moderate demand for mortgage loans. U.S. farmland values increased 2 percent in 1990, rose an estimated 1-3 percent in 1991, and are expected to increase as much as 2 percent in 1992. This will make 6 straight years of farmland value increases, but during the past 3 years, the rate of increase has lagged the rate of inflation. During recent years, the overall strengthening of land values has lessened lenders' earlier con-

cerns about the erosion of collateral values. In addition, there now may be heightened interest in real estate investment to diversify portfolios. Farm real estate debt should increase slightly in 1992.

Demand for nonreal estate loans should remain moderate in 1992. Farm capital expenditures fell nearly 60 percent during 1980-86, but gradually recovered during 1987-91. Unit sales of farm machinery in 1992 are projected to be similar to 1991 sales. Positive factors for 1992 include lower interest rates, strong crop cash receipts, and a farm sector debt/asset ratio near 1990-91 levels. But these positive factors must be balanced against an outlook for declining net farm income, increased planted acreage, modest price rises for purchased inputs, and weather problems in some areas. Nonreal estate debt is projected to increase slightly in 1992.

Credit Access Is Ample

Creditworthy farmers should have ample access to loans in 1992, mostly from commercial banks and the FCS, the largest suppliers. Banks' low loan-to-deposit ratios provide liquidity to meet increased credit needs. The FCS is offering farm customers lower interest rates and favorable credit arrangements in an effort to expand market share. But because 1986 legislation prohibits the FCS from underpricing competition, the FCS follows—rather than leads—trends. Life insurance companies vary in their lending policies, ranging from inactivity to aggressive lending. Total life insurance company lending is expected to increase in 1992.

The availability of direct FmHA loans to family-sized farmers unable to obtain

credit elsewhere should be adequate in fiscal 1992. Fiscal 1992 Operating Loan authority, at \$850 million, is up from \$493.3 million in fiscal 1991. Farm Ownership authority, at \$66.75 million, is up from fiscal 1991's \$57.2 million. FmHA's authority to guarantee loans made by commercial and cooperative lenders should also be ample in fiscal 1992. Approximately \$1.4 billion in loan guarantees was issued in 1991, far less than the maximum \$2.47 billion in lending authority available for 1992. (The fiscal 1992 guaranteed maximum lending authority is down from the \$3.6 billion of 1991, but even so, only 35.4 percent and 40.0 percent of the respective ownership and operating credit lines were used in 1991.) Demand for loan guarantees in 1992 is not expected to change greatly from 1991.

The outlook for 1992 indicates that competition will continue to remain keen for high-quality farm loans. Trends in the general economy and competition should help keep interest rates down. The overall mood will generally remain cautious. Producers are careful in acquiring new debt and lenders are carefully scrutinizing the creditworthiness of borrowers. Farmers who are good credit risks will have no difficulty in acquiring credit in 1992. Lenders will have adequate funds. Commercial banks are watching collateral requirements with an eye toward the now more stringent regulations. Farmers will need to demonstrate adequate cash flow, and some marginal farm operators will continue to face challenging credit access problems. In short, farm lenders (except FmHA) have largely recovered from the problems experienced during the early and mid-1980's and are prepared to serve the financial needs of creditworthy farmers.

Farm Loan Rates Declined Throughout 1991

Farm interest rates should continue to slide during most of 1992, but begin to strengthen toward the end of the year.

Short-term interest rates for the general economy are the lowest in 20 years, while long-term rates continue to decline. A large portion of farm loans is made on a floating rate basis, where rates are tied to some national measure of the bank's average cost of funds over the previous few months. Hence, loan rates to farmers follow movements in the general economy's interest rates.

The reduction in interest rates has given farm lenders access to lower-cost funds. Rural banks have translated this opportunity into both increased lender earnings and reduced loan rates to farmers. This added short-term profitability is being used by lenders to build capital and cover losses on poorly performing commercial real estate loans. The decline in interest rates has also raised the quality of lender assets by increasing the likelihood that loans will be repaid.

Assuming that the volume of borrowing remains the same, reduced interest charges result in reduced interest payments and therefore reduced costs of farm production. This will improve net farm incomes for the roughly half of all American farmers who rely to some degree on debt financing. However, if farmers respond to lower interest rates by increased borrowing, interest expenses could rise. In addition, rural banks have observed very little shifting from savings deposits and CD's to higher yielding but riskier investments. Hence, farmer revenues could decrease due to declining interest rates on farmers' financial assets. The overall effect on farm net incomes will depend on the

relative magnitudes of these two (i.e. revenue and expense) offsetting changes.

Farm interest rates will probably decrease during the first three quarters of 1992 and gradually increase starting in the fourth quarter. Interest rates on new farm loans will probably average about 100 basis points less than the 1991 average. Because all loans cannot be instantaneously refinanced at the new lower rates, declines in average interest rates on all outstanding loans will lag declines in market rates. Smaller farm banks should respond more slowly than large banks. These projected interest rate reductions could benefit creditworthy borrowers who expand their operations during this period of low mortgage rates.

Commercial Banks

Commercial bank nonreal estate interest rates declined from an average of 11.5 percent in 1990 to 9.8 percent in 1991. Interest rates declined over the entire year, except for a 30-basis-point increase in the third quarter due to a hike in loan rates by the large commercial banks. Interest rates on loans at "other" banks continue to be higher (about 11.3 percent) than those made by large commercial banks. Rates at all banks were 2.5 percent lower in the last quarter of 1991 than for the same quarter for 1990.

Farm Credit System

Interest rates on nonreal estate loans declined from 11.16 percent in 1990 to

10.30 percent in 1991. Interest rates on real estate loans declined from 10.56 percent in 1990 to 9.88 percent in 1991 (appendix table 5). Rates declined over the entire year, and were 1 percent lower for nonreal estate loans in the last quarter than in the first quarter. The comparable decline for real estate loans was 85 basis points.

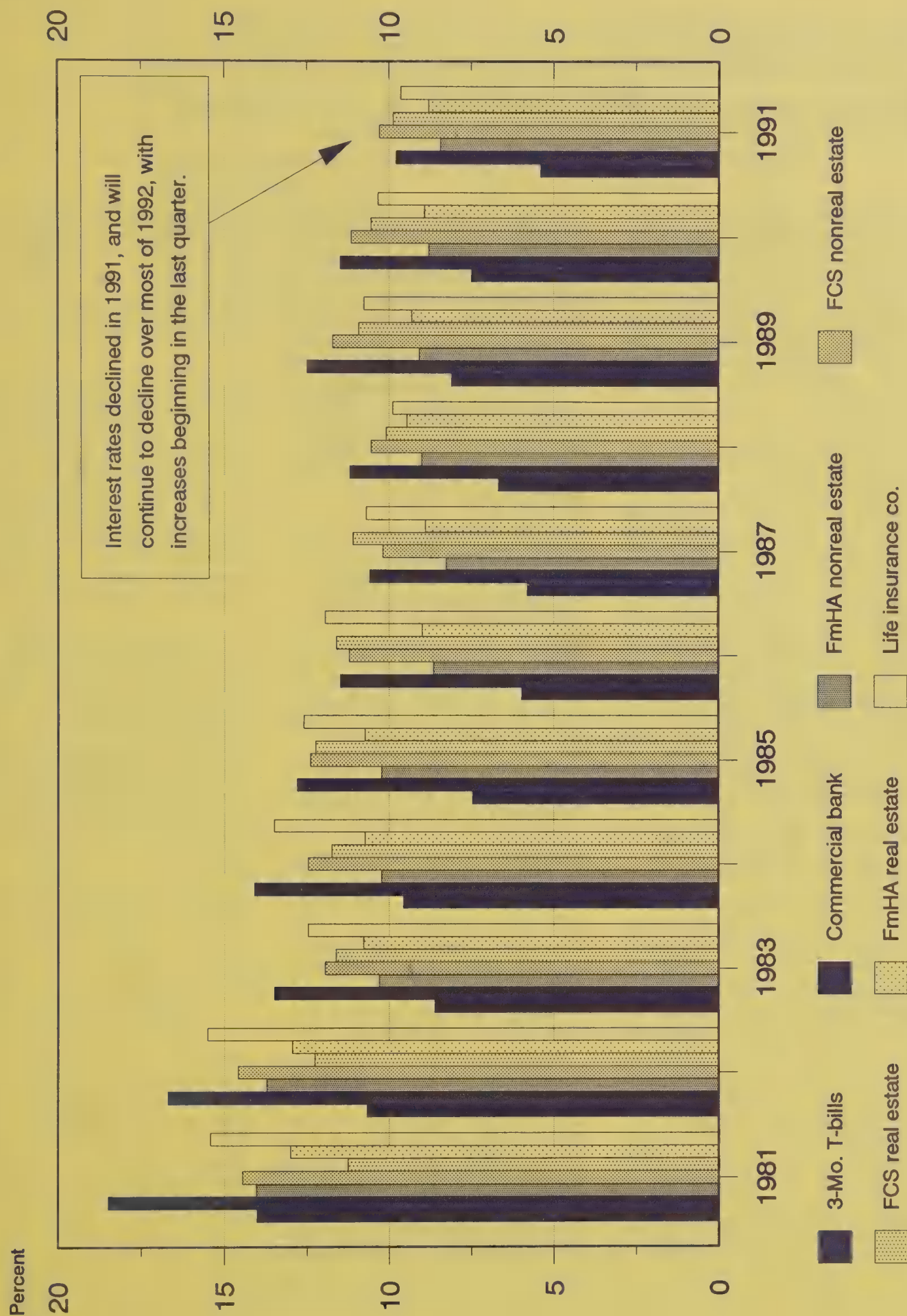
Farmers Home Administration

For nonreal estate loans, interest rates on regular loans declined from 8.81 percent in 1990 to 8.44 percent in 1991. For limited resource loans, rates declined from 5.81 in 1990 to 5.0 percent in 1991. Limited resource rates were steady over the year, while regular rates dropped from the first to the second quarter, then were constant for the rest of the year. The 3.25- to 4.0-percent spread between regular and limited resource loans during 1991 was wider than the 3-percent spread that held through most of the 1980's. For real estate loans, rates on regular loans declined 13 basis points between 1990 and 1991. Limited resource interest rates were a constant 5 percent for both years.

Life Insurance Companies

Interest rates on real estate loans declined from 10.34 percent in 1990 to 9.66 percent in 1991, a drop of 68 basis points. Rates declined throughout the year from a first-quarter high of 10 percent to a fourth-quarter low of 9.24 percent.

Figure 7--Selected Agricultural Interest Rates, 1981-91



Commercial Banks Hold Largest Share of Farm Loans

Farm debt increased in 1991 after a 6-year decline. Farm loan delinquencies and chargeoffs continued at lower levels for commercial lenders.

The distribution of the farm sector's \$139.3 billion total debt, excluding operator households, as of December 31, 1991, is summarized in table 1. Commercial banks account for 35.4 percent of all farm loans, making them the leading agricultural lender, followed by the FCS with 24.7 percent. Individuals and others are estimated to hold 20.4 percent of the total.

Total farm debt at the end of 1991 was 29.6 percent (\$57.3 billion) below its 1983 peak (appendix table 1). Real estate debt in 1991 was 30.1 percent below its 1984 peak and nonreal estate debt was 26.4 percent lower than its 1983 high (appendix tables 2 and 3). The overall paydown in the farm loan portfolio appears to have been driven more by demand than supply. For a variety of reasons, farmers have decided to hold less debt. Large amounts of debt and relatively high interest rates made debt servicing a costly item in the early 1980's. By 1987-90, interest rates were lower, farm income was stronger, asset values were stable, and debt was down.

Commercial Banks Continue To Increase Market Share

Within the real estate debt portfolio, the value of outstanding real estate loans held by commercial banks has increased 76.6 percent since 1984. Some of the increase resulted from higher loan collateral requirements in the wake of the farm financial crisis rather than from new land loans. Collateral requirements shift production loans into the real estate category. Real estate loans held by the FCS were 47.4 percent below their 1984 peak by 1991. Nevertheless, the FCS remains the dominant real estate lender. The dollar value of FmHA real estate loans peaked in 1986 and was 21.2 percent below this level in 1991.

A number of important changes have occurred in the nonreal estate portfolios of the major farm lenders (appendix table 3). By the end of 1988, FCS nonreal estate loans had declined 58.8 percent from their 1981 peak, but they subsequently increased 12.1 percent during 1988-91. At the end of 1987, commercial bank loans had decreased 26.7 percent from their top figure in 1984, but increased 17.1 percent during 1985-91. FmHA nonreal estate loans decreased 36.3 percent during 1985-90, but edged up 1.8 percent in 1990-91.

The 1981-88 nonreal estate debt paydown by FCS borrowers totaled \$12.5 billion, and the 1984-87 paydown of commercial banks was \$10 billion. The FCS decline was all the more dramatic because it came from a smaller initial base. In 1991, the FCS held 15.2 percent and commercial banks held 50.0 percent of total nonreal estate debt. The comparable figures in 1981 were 25.4 and 37.3 percent respectively.

Delinquencies and Chargeoffs Continue at Lower Levels

During 1982-91, FmHA had the highest delinquencies in terms of both dollars and share of the portfolio (table 2). The total value of delinquent loans peaked for commercial banks in 1985 and for the FCS and life insurance companies in 1986. Delinquencies as a percentage of outstanding farm loans peaked in 1986 for all lenders except FmHA.

A key concern of farm lenders is the amount of loan losses they must absorb. Losses for commercial banks, FCS, and FmHA for 1982-91 are shown in table 3. During 1985-89, agricultural loan chargeoffs by these lenders totaled \$13.8 billion. The varying pattern of losses reflects institutional, accounting, and regulatory differences. Commer-

cial banks tend to focus on farm production loans, where problems surfaced more quickly than for the farm mortgages that dominate FCS's loan portfolio. Moreover, until 1985 the FCS tended to extend more loan forbearance than commercial banks.

Another factor explaining some of the difference in the timing of writeoffs between FCS and commercial banks may be the Federal bank regulators' March 1986 policy initiative to assist banks experiencing heavy losses due to adverse developments in the farm and energy sectors. One incentive for bankers to work with their cash-strapped borrowers was a change in the way renegotiated debt is required to be reported.

FmHA exercised liberal loan foreclosure forbearance into 1985, which resulted in low farm loan losses being reported by the agency. FmHA's policy of considerable forbearance continued in 1986 and 1987 because the agency's foreclosure activities were restricted by Congress and the courts. The outcome was low reported loan losses, but an accumulating amount of delinquent loans.

Beginning in fiscal 1987, FmHA began to resolve more vigorously the delinquent loan volume that accumulated during the 1980's. The Agricultural Credit Act of 1987 gave FmHA extensive guidelines to resolve its problems. FmHA has the authority to foreclose on delinquent loans if a complex set of restructuring rules, including partial forgiveness of principal and interest, fails to assist the borrowers. FmHA farm loan foreclosures were slowed for approximately 6 months during fiscal 1991 while regulations were being revised.

Table 1--Distribution of farm debt, excluding operator households, by lender, December 31, 1991 1/

Lender	Type of debt		Total
	Real estate	Nonreal estate	
Percent of total			
Commercial banks	12.2	23.2	35.4
Farm Credit System	17.6	7.1	24.7
Farmers Home Administration	5.5	6.9	12.3
Life insurance companies	7.2	---	7.2
Individuals and others	11.1	9.3	20.4
Commodity Credit Corporation	2/	---	2/
Total	53.6	46.4	100.0

1/ Preliminary. Due to rounding some subcategories may not add to totals. 2/ \$4 million or 0.0029 percent of total debt. This includes CCC storage and drying facilities loans, but excludes CCC crop loans.

Table 2--Delinquent farm loans, by lender, 1982-91

Lender	Yearend 1/									Mid-year 1991 2/
	1982	1983	1984	1985	1986	1987	1988	1989	1990	
Billion dollars										
Commercial banks 3/ 4/	0.9	1.5	2.1	2.6	2.2	1.4	1.0	0.7	0.6	0.7
Farm Credit System 5/	.7	1.3	2.1	5.3	7.1	5.2	3.3	2.6	2.8	2.8
Life insurance companies 6/	.8	1.0	1.2	1.7	1.8	1.3	.8	.4	.4	.6
Farmers Home Administration 7/	9.5	11.0	12.1	11.9	12.0	11.8	12.5	11.1	8.1	7.9
Percentage of outstanding loans										
Commercial banks 3/ 4/	2.5	3.8	5.2	7.3	7.0	4.8	3.3	2.3	1.9	2.1
Farm Credit System 5/	1.1	1.8	3.3	8.7	14.4	9.9	6.5	5.0	5.4	5.5
Life insurance companies 6/	6.4	8.3	9.6	15.1	17.0	14.3	8.9	4.7	4.2	6.4
Farmers Home Administration 7/	37.9	43.9	45.9	41.5	42.9	45.8	49.8	47.8	41.3	44.4

NA= Not available. 1/ End of fiscal year (Sept. 30) for the Farmers Home Administration (FmHA) and end of the calendar year (Dec. 31) for the other lenders. 2/ June 30. 3/ Delinquencies were reported by institutions holding most of the farm loans in this lender group. Data shown are obtained by assuming that the remaining institutions in the group experienced the same delinquency rate. 4/ Farm nonreal estate loans past due 90 days or more or in nonaccrual status, from the reports of condition submitted by insured commercial banks. 5/ Data shown are nonaccrual loans. The Farm Credit System also reports "other high-risk loans," but not all such loans are delinquent. 6/ Loans with interest in arrears more than 90 days. 7/ Prior to 1988 a loan was delinquent when a payment was more than \$10 and 15 days past due. Beginning in 1988, a loan is delinquent if a payment is more than 30 days past due. Data shown are for September 30; thus, they avoid the yearend seasonal peak in very short-term delinquencies and so are more comparable with those shown for other lenders. The FmHA data reflect the total outstanding amount of the loans that are delinquent (as do the data shown for other lenders), rather than the smaller amount of delinquent payments that is often reported as FmHA "delinquencies."

Source: American Council of Life Insurance, Board of Governors of the Federal Reserve System, The Farm Credit Council, and Farmers Home Administration.

Table 3--Farm loan losses (net chargeoffs), by lender, 1982-91

Year	Commercial banks 1/		Farm Credit System 2/		Farmers Home Administration 3/		Exhibit: Life insurance company foreclosures 4/	
	Million dollars	(Percent of loans outstanding at end of period) 5/	Million dollars	(Percent of loans outstanding at end of period) 5/	Million dollars	(Percent of loans outstanding at end of period) 5/	Million dollars	(Percent of loans outstanding at end of period) 5/
1982	NA		13	(0.0) 6/	32	(0.1)	170	(1.3)
1983	NA		8	(0.0) 6/	77	(0.3)	247	(1.9)
1984	900	(2.3)	428	(0.5)	128	(0.5)	289	(2.5)
1985	1,300	(3.3)	1,105	(1.6)	257	(0.9)	530	(4.8)
1986	1,195	(3.4)	1,321	(2.3)	434	(1.5)	827	(7.9)
1987	503	(1.6)	488	(0.9)	1,199	(4.3)	692	(7.5)
1988	128	(0.4) 7/	413	(0.8)	2,113	(8.4)	364	(4.0)
1989	91	(0.3)	(5)	(0.0) 9/	3,297	(12.4)	204	(2.3)
1990	51	(0.2)	21	(0.04)	3,199	(13.5)	85	(0.9)
1991 8/	37	(0.0) 6/	34	(0.07)	2,289	(10.4)	61	(0.6)

NA= Not available. 1/ Calendar year data for nonreal estate loans. 2/ Calendar year data. 3/ Fiscal year data beginning October 1. Includes data on the insured (direct) and guaranteed farm loan programs. 4/ Loan charge-off data are not available for life insurance companies. 5/ Loan loss data rounded to nearest million dollars. 6/ Less than 0.05 percent. 7/ Does not include losses under the deferred loan program initiated in the fourth quarter of 1987. Beginning during that quarter small banks with more than 25 percent of their loans to agriculture in farm-dependent areas have been allowed (after regulatory approval) to amortize loan losses over a seven-year period. As of June 30, 1990, 45 banks reported more than \$34 million in agricultural loan loss deferrals. 8/ Commercial bank data through June 30, 1990 and Farm Credit System and life insurance company data through September 30, 1990. 9/ A gain of less than 0.01 percent.

Source: American Council of Life Insurance, Board of Governors of the Federal Reserve System, The Farm Credit Council, and Farmers Home Administration.

Agricultural Banks Continue Strong Performance

Farm banks are healthy, liquid, and in position to continue their current leadership among farm lenders.

Agricultural banks are among the strongest institutions in the commercial banking system. Annualized mid-1991 results indicate a rate of return on assets (ROA) of 1.1 percent at agricultural banks, well above their low of 0.4 percent in 1986 and the current industry average of 0.6 percent.

ROA reflects improved loan quality in farm bank portfolios, where only 1.9 percent of loans were in nonperforming status at midyear, down from 4.7 percent in 1986 (table 4). This was substantially better than the industrywide rate of 4.1 percent. In both ROA and loan quality, agricultural banks outperformed the small nonagricultural banks to which they are often compared.

Loan-to-deposit ratios at agricultural banks were up over 1 percentage point at midyear 1991. The increase left farm bank loan-to-deposit ratios at 56.3 percent, and with ample capacity to extend additional credit. However, the decline in the economy's performance and poor health of the banking industry made increased lending problematic.

What Is an Agricultural Bank?

The two most common definitions of an agricultural bank are those of the Board of Governors of the Federal Reserve System (FRB) and the Federal Deposit Insurance Corporation (FDIC). The FRB classifies banks as agricultural if their ratio of farm loans to total loans exceeds the unweighted average of the ratio at all commercial banks on a given date (16.49 percent on June 30, 1991). The FDIC criterion is a 25-percent ratio of agricultural loans to total loans. As of June 30, 1991, there were 4,077 agricultural banks under the FRB definition and 3,165 by the FDIC definition (table 5).

Agricultural bank numbers peak at mid-year due to seasonality in farm loan demand and then decline as loans are paid down. From June 1990 to June 1991, the number of FRB farm banks dropped by 116 (2.8 percent) while the FDIC figure dropped by 39 (1.2 percent). Unless otherwise indicated, the FRB agricultural bank definition is used throughout this report.

Although the number of farm specialty banks declined during the year ending June 30, 1991, commercial bank lending to agriculture grew. Commercial bank farm loans increased 7.1 percent with increases of 7.9 percent in nonreal estate debt and 5.5 percent in real-estate-secured debt. The agricultural bank share of total commercial bank farm debt increased 1 percentage point, to 57.1 percent.

Farm Loan Quality Is High

Overall, the quality of commercial bank farm production loans was good. Only 2.2 percent of such loans at all banks (\$759 million) was in nonperforming status, down 4.1 percent in dollars from the previous year. An additional 1.1 percent (\$373 million) was reported as renegotiated and performing, down 9 percent from a year earlier. Agricultural banks reported 2.0 percent of farm production loans nonperforming, with another 1.5 percent renegotiated and performing.

Net chargeoffs of farm nonreal estate loans for all banks increased to \$38 million from \$15 million from the previous year and represented 0.1 percent of such loans at farm banks. Agricultural bank loan loss provisions were down to 0.4 percent, reflecting management's expectation of lower loss rates in the future (table 6).

Profitability Excellent, Capital Strong

Agricultural bank profits were excellent, with ROA at 1.1 percent (a good long-run level) and rate of return on equity (ROE) at 11.4 percent, both annualized from midyear figures. The ROE measure, up slightly from a year earlier, was achieved in spite of a softening economy and the widely reported problems of the banking industry. Agricultural banks outperformed their small nonagricultural counterparts, which achieved an average ROA of 0.9 percent and a ROE of 10.4 percent. Both bank types remained highly capitalized. Farm banks had capital-to-asset ratios of 10.2 percent, on average, while the small nonfarm banks' ratio stood at 9.1 percent.

Loan-to-deposit ratios for the two bank groups moved in opposite directions. Agricultural bank loan-to-deposit ratios increased to 56.3 percent, but are still lower than desired by bank management. This compares to 66.8 percent at small nonagricultural banks. The ratio of loans to assets sheds some additional light on relative bank liquidity. The average loan-to-asset ratios stood at 49.6 percent and 58.7 percent, respectively, for the two groups. Thus, agricultural banks retained substantially more liquidity, allowing them to respond to any increase in credit demand.

The improvement in farm bank loan quality was reflected in the continued decline in the number of failed and weak farm banks. Only 10 agricultural banks failed in 1991 (appendix table 9) with an additional 15 listed as weak at midyear. Total nonagricultural bank failures also fell from a year earlier to 98. Only 114 nonfarm banks were classified as weak, but the number of weak large banks rose from 6 to 13 and remains a major source of concern.

Numbers of farm banks are down regardless of how they are defined. Having dealt effectively with bad loans, they are now quite healthy, with the capacity to service creditworthy borrowers.

Table 4--Nonperforming loans as a percentage of total loans by type of bank, 1984-91 1/

Type of bank	June 30, 1984	June 30, 1985	June 30, 1986	June 30, 1987	June 30, 1988	June 30, 1989	June 30, 1990	June 30, 1991
---Percent---								
Agricultural								
Total nonperforming 2/	3.2	4.1	4.7	3.8	2.7	2.3	2.0	1.9
Past due 90 days 3/	1.6	1.6	1.6	1.2	.8	.7	.6	.6
Nonaccrual	1.6	2.5	3.1	2.6	1.9	1.5	1.3	1.3
Nonagricultural 4/								
Total nonperforming 2/	2.1	2.3	2.6	2.5	2.2	2.1	2.0	2.3
Past due 90 days 3/	1.0	.9	1.0	.8	.7	.7	.6	.7
Nonaccrual	1.1	1.4	1.6	1.7	1.5	1.4	1.4	1.6

1/ Data are weighted by bank asset size. 2/ Columns may not equal totals due to rounding. 3/ Still accruing interest. 4/ Nonagricultural banks with less than \$500 million in assets which were not agricultural by the FRB definition.

Sources: Johnson, James, Emanuel Melichar, and C. Edward Harshbarger, "Financial Condition of the Farm Sector and Financial Institutions," paper presented at the symposium on Financial Stress in Agriculture Issues and Implications, Kansas City, MO., Nov. 24, 1986, and calculated from the Report of Condition and Report of Income files, Board of Governors of the Federal Reserve System.

Table 5--Number of agricultural banks by definition, 1983-91 1/

Item	1983	1984	1985	1986	1987	1988	1989	1990	1991 2/
Number									
Commercial banks	14,427	14,410	14,283	14,008	13,505	12,961	12,635	12,270	12,081
Agricultural banks (FRB)	5,115	4,987	4,847	4,704	4,480	4,337	4,180	4,067	4,077
FRB farm loan ratio (Percent)	17.56	16.97	16.14	15.78	15.60	15.73	15.84	15.94	16.49
Agricultural banks (FDIC)	4,065	3,922	3,682	3,516	3,335	3,236	3,172	3,090	3,165

1/ Includes domestically chartered, FDIC-insured commercial banks with deposits, assets, and loans. 2/ 1991 figures are for June 30, all others are December 31.

Source: Calculated from the Report of Condition and Report of Income files, Board of Governors of the Federal Reserve System (FRB).

Table 6--Selected bank performance measures by type of bank, 1984-91 1/

Performance measure	1984	1985	1986	1987	1988	1989	1990	1991 Estimated
Percent								
Rate of return on equity capital								
Agricultural banks	9.0	6.0	5.1	7.6	10.0	10.7	10.7	11.4
Nonag small banks	12.0	11.0	8.3	8.1	8.7	10.1	8.5	10.4
Rate of return on total assets								
Agricultural banks	.7	.5	.4	.7	.9	1.0	1.0	1.1
Nonag small banks	.8	.8	.6	.6	.7	.8	.7	.9
Provisions for loan losses as a percent of total loans								
Agricultural banks	1.5	2.4	2.4	1.4	.8	.7	.5	.4
Nonag small banks	.8	1.0	1.3	1.0	.9	.8	1.0	.8
Capital as a percent of assets								
Agricultural banks	9.5	9.6	9.5	9.8	10.0	10.1	9.9	10.2
Nonag small banks	8.5	8.5	8.4	8.8	8.8	9.0	9.0	9.1

1/ Rate of return on equity is net income after taxes as a percent of the average of total equity capital at the beginning and end of the year. Rate of return on total assets is net income after taxes as a percentage of total assets on December 31.

Small Banks Dominate Agricultural Lending

Agricultural specialty banks still hold over half of farm loans, but large nonagricultural banks play an important role.

Agricultural commercial banks held 56.7 percent of all commercial bank agricultural loans as of June 30, 1991, a slight increase from a year earlier. These relatively small specialty banks retained high levels of liquidity and were well positioned to extend additional credit. They do, however, face significant competition from other commercial banks (table 7). Larger banks often hold higher levels of farm loans, but these represent a small proportion of their total loan portfolios. Nearly one-quarter of all commercial bank farm debt is held by the largest class of nonagricultural banks.

Some bank specialists argue that \$100 million in assets is the minimum amount for long-run efficiency and that smaller banks are therefore at risk. Banks under this size hold 54.3 percent of all commercial bank farm debt. The average dollar amount of farm loans held per bank is quite small, reflecting the local lending commitment of these banks. Their knowledge of individual borrower credit risk enables them to serve the small farmer/borrower.

Small Banks Have Higher Capital, Lower Loan Ratios

Bank capital reduces risk of bank failure by cushioning losses and supports liquidity by maintaining borrower confidence, allowing the bank continued access to financial markets. At mid-1991, the smallest banks' equity capital ratio was 166 percent that of the largest banks (table 8). Further, the smallest banks held a much greater proportion (92 percent) of capital in the form of owners' equity than did the largest banks (70 percent). Large banks were taking advantage of greater leverage to increase returns on equity—a relatively risky strategy—while small banks were taking a more conservative lending ap-

proach. This riskier behavior by large banks is now evident in their well-publicized difficulties caused by nonperforming real estate loans. Over 6 percent of big bank real estate loans were overdue as of June 30, 1991 (appendix table 7).

The difference in bank management approaches is reflected in loan-to-deposit and loan-to-asset ratios. The loan-to-deposit ratio has traditionally been used to measure liquidity. However, changes in financial markets have altered the ratio's interpretation. Some types of loans can now be readily sold, reducing the need to hold securities for liquidity purposes and allowing expansion of loan portfolios.

Expanded markets for nondeposit funds allow banks to alter management strategies through the purchase of funds, especially short-term. Management, adapting to these changes, might expect higher loan-to-deposit and loan-to-asset ratios as well as lower deposit-to-liability ratios. The practicality of these management strategies is clearly related to bank size, with much wider use among large banks (table 8). This funding approach is more flexible and represents an advantage for large banks over smaller ones in reacting to available opportunities.

Mixed Indications of Size, Profit Relationship

Profitability is normally measured by rate of return on assets (ROA) and rate of return on equity (ROE). The smallest banks were significantly less profitable than all others except the largest banks as measured by ROA (table 9). ROE showed the same general trend, with peak performance in the \$300-\$500 million class. However, the impact of leverage vaulted the large banks to the mid-

dle of the pack in returns to equity capital.

The smallest bank group, those with \$25 million or less in assets, included 1,751 agricultural banks and 1,351 nonagricultural banks and was the least profitable group. The smallest agricultural banks provided about 12 percent of commercial bank loans to agriculture, making their continued profitability a serious concern to farmer/borrowers.

When the smallest class was separated into agricultural and nonagricultural banks, a different and startling profitability picture emerged. The agricultural banks achieved annualized ROA of 0.95 percent and ROE of 9.57 percent—near the top for all banks. However, the smallest nonagricultural banks earned ROA of 0.16 percent and ROE of 1.55 percent at annualized midyear rates. These low profit figures are partially explained by the existence of newly chartered banks, which generally take at least 3 years to attain profitability, assuming they survive at all. But, if these rates of return persist for established small banks, they will lead to the demise of many. One piece of evidence that regulators have not ignored smaller agricultural banks is the existence of the Capital Forbearance program for allowing long-term writedowns of nonperforming agricultural loans (appendix table 6).

Over the longer run, small banks, which include most agricultural banks, face significant management challenges as a result of deregulation and innovation in financial markets. The smallest banks will watch with concern as major regulatory and legislative changes being suggested appear to be crafted with the prospects of large banks in mind.

While small banks still lead in farm lending, some storm clouds are appearing on the horizon. Some structural changes in the industry are generating uncertainty among small banks.

Table 7--Agricultural lending of agricultural and nonagricultural banks by bank size, June 30, 1991 1/

Total assets Mil. dol.	Agricultural banks					Nonagricultural banks				
	Banks	Total ag loans	Avg. ag loans	Ag Ag lending share 2/	Ag Ag loans/ total loans	Banks	Total ag loans	Avg. ag loans	Ag Ag lending share 2/	Ag Ag loans/ total loans
	No.	---Mil. dol.---	---	---Percent---	---	No.	---Mil. dol.---	---	---Percent---	---
under 25	1,768	6,207	3.5	11.7	47.2	1,351	487	.4	0.9	4.1
26 - 50	1,289	9,210	7.1	17.4	40.9	1,836	1,276	.7	2.4	3.4
51 - 100	760	8,781	11.6	16.6	35.2	2,013	2,722	1.4	5.2	3.4
101 - 300	251	5,169	20.6	9.8	27.9	1,813	4,172	2.3	7.9	2.3
301 - 500	6	323	53.8	.6	27.0	371	1,407	3.8	2.7	1.6
over 500	3	297	85.6	.5	16.4	620	12,796	20.6	24.2	0.8
Total	4,077	29,986	7.4	56.7	36.6	8,004	22,860	2.9	43.3	1.1

1/ Figures are weighted within size class. 2/ This represents the percentage of total commercial bank agricultural loans held by this size group of banks.

Source: Calculated from the Report of Condition and Report of Income files, Board of Governors of the Federal Reserve System.

Table 8--Selected commercial bank solvency and liquidity ratios by bank size, June 30, 1991 1/

Total assets Million dollars	Comm. banks No.	Capital to asset 2/	Equity to asset	Loan to deposit	Loan to asset	Deposit to liability
		---	---	---	---	---
Under 26	3,119	11.0	10.1	57.6	50.9	98.1
26 - 50	3,125	10.1	9.1	60.1	53.4	97.8
51 - 100	2,773	9.6	8.7	60.8	54.9	97.3
101 - 300	2,064	9.0	8.1	66.5	58.6	95.7
301 - 500	377	8.7	7.6	72.0	61.8	92.8
over 500	623	8.7	6.1	85.2	63.4	79.3
Total/Avg.	12,081	8.9	6.7	79.4	61.8	83.4

1/ Weighted average within size class. 2/ Total capital includes equity capital.

Source: Calculated from the Report of Condition and Report of Income files, Board of Governors of the Federal Reserve System.

Table 9--Selected commercial bank profitability and efficiency measures by bank size, June 30, 1991 1/

Total assets Mil. dol.	Return on assets 2/	Return on equity 3/	Asset utilization 4/	Noninterest income to total income	Interest expense to total expense	Interest expense to interest income
				---	---	---
under 26	0.59	5.88	9.72	8.38	57.03	54.95
26 - 50	0.73	7.99	9.77	8.22	59.57	55.68
51 - 100	1.19	13.64	9.86	8.96	60.34	55.77
101 - 300	0.85	10.49	9.93	9.84	59.73	55.42
301 - 500	0.83	10.88	9.94	10.46	60.14	55.78
over 500	0.51	8.26	10.74	18.84	59.28	60.93
Average	0.60	9.00	10.53	16.65	59.39	59.57

1/ All ratios are on an annualized basis and weighted within class size. 2/ Rate of return on assets is net income after taxes as a percentage of total assets. 3/ Rate of return on equity is net income after taxes as a percentage of total equity. 4/ Asset utilization is gross income as a percentage of total assets.

Source: Calculated from the Report of Condition and Report of Income files, Board of Governors of the Federal Reserve System.

Farm Credit System Situation Continues To Improve

A favorable interest-rate environment has allowed Farm Credit System institutions to rebuild capital. St. Paul and St. Louis district banks plan merger aimed at trimming costs.

After a decade of adversity, the Farm Credit System (FCS) entered 1992 in a strengthened financial condition. The size of its loan portfolio and its share of the farm debt market have stabilized. Earnings and earnings quality have improved. Capital levels have been restored. Nonperforming assets, though still unacceptably high, continue to work their way through the portfolio. In short, the last few years of record farm income have benefited the FCS.

After suffering substantial losses in loan volume from 1983 through 1987, the FCS portfolio has stabilized at roughly \$50 billion, while its share of the farm loan market is approximately 25 percent (table 10, appendix table 1). FCS market share for long-term farm real estate loans has settled at roughly 33 percent, and its short- and intermediate-term portfolio represents a 15-percent market share.

FCS earnings quality steadily improved as its loan portfolio stabilized and the farm sector recovery progressed (table 11). FCS income may have surpassed \$800 million for the 1991 calendar year. Although FCS income reached \$700 million in 1988, reversals in the allowance for loan losses accounted for all but \$20 million. By 1990, however, net income was dominated by solid operating results led by a strong performance in net interest income. This trend continued in 1991. The increase in net interest income stems from a faster decline in the System's cost of funds than in the interest it charges on loans and from the decline in nonearning assets.

Capital adequacy has been a major regulatory concern. By mid-1991, FCS at-

risk capital, including loss allowances and the FCS insurance fund, stood at \$6.8 billion or 13 percent of loans outstanding (table 12). This was nearly as high as the level of surplus and loan loss reserves in 1985 and was a higher percentage of loans outstanding. All banks have now attained interim minimum risk-adjusted capital levels, and all but three banks have attained the permanent 7-percent risk-adjusted capital standard that takes effect in 1993.

Nonperforming loans (nonaccrual loans plus accrual loans over 90 days past due) decreased substantially from 1985 through 1989, both in dollar terms and as a percent of loans outstanding (table 12). This trend has stalled in the past 2 years for at least two reasons. First, the Farm Credit Administration (FCA), which regulates the FCS, has imposed more conservative standards for classifying nonaccrual loans. The effect of these standards is indicated by the change in the proportion of nonaccrual loans that were current in both interest and principal payments. At yearend 1990, about 58 percent of nonaccrual loans were current, compared to 47 percent at yearend 1989. This indicates that loan quality continues to improve. On the other hand, it is also possible that the remaining nonperforming assets are those that will be the most difficult to work through or liquidate.

Historical comparisons do not, however, tell the whole story of the improvement in the FCS. Policy and regulatory changes have also strengthened the system. These include the reorganization of the FCA as an "arms-length regulator," the adoption of Generally Accepted Accounting Principles (GAAP)

accounting and outside auditing, uniform and conservative underwriting standards, risk-adjusted capital standards, rigorous exams of FCS lending institutions undertaken by FCA examiners rather than district bank employees, much improved asset/liability management, and the imposition of constraints on assisted banks through agreements with the FCS assistance corporation.

System Efficiency Needs Attention

The FCS faces challenges in attaining measurable progress in improving overall cost efficiency, and weaknesses in the cooperative- and sector-specific nature of the system have not been addressed.

Despite massive restructuring (see special article), the FCS has been unable to improve overall operating efficiency (last line, table 12). Overall operating costs per dollar loaned increased as the loan portfolio shrank and its quality deteriorated in the mid-1980's. In contrast, the Banks for Cooperatives (BC's) managed to lower per dollar operating costs by about 25 basis points over the same period.

In an effort to duplicate some of the efficiency gains enjoyed by the BC's, the St. Louis and St. Paul districts are planning to complete the first voluntary merger of farm credit districts on July 1, 1992. Aggressively pursuing possible gains in operating efficiency could significantly enhance the FCS's competitive position.

Loan volume stabilizes as income, income quality, and at-risk capital continue to improve. Nonaccrual loans and operating costs remain stubbornly high.

Table 10--Farm Credit System loan volume, by loan type, as of December 31, 1985-90, and September 30, 1991

Loan type	1985	1986	1987	1988	1989	1990	1991
Billion dollars							
Long-term real estate	46.58	39.26	34.35	32.18	30.24	29.42	29.25
Short and intermediate term	15.07	11.56	9.93	9.26	10.02	10.67	11.39
Loans to cooperatives	8.15	7.4	8.22	9.99	10.44	11.08	10.62
Total	69.8	58.22	52.5	51.43	50.7	51.17	51.26

Source: Federal Farm Credit Banks Funding Corporation, Farm Credit System Annual Information Statement and Farm Credit System Quarterly Information Statement, various dates.

Table 11--Farm Credit System income statement, as of December 31, 1985-90, and September 30, 1991

Item	1985	1986	1987	1988	1989	1990	1991
Billion dollars							
Total interest income	8.974	7.169	5.783	5.822	6.270	6.129	4.188
less interest expense	7.679	6.389	5.274	5.035	5.264	4.893	3.040
Net Interest Income	1.295	0.781	0.509	0.787	1.006	1.235	1.148
less provision for loan losses	-2.969	-1.798	0.196	0.681	0.285	0.041	-0.037
less loss on other property	-0.285	-0.233	-0.012	0.069	0.067	0.031	0.019
plus other income	0.152	0.129	0.098	0.122	0.148	0.157	0.131
less other expense	-0.898	-0.805	-0.791	-0.736	-0.745	-0.749	-0.582
less debt repurchase	0	0	0	-0.174	0	-0.039	0
less taxes	0.016	0.013	-0.017	-0.044	-0.066	-0.068	-0.056
Net Income	-2.689	-1.913	-0.017	0.705	0.695	0.608	0.624

Source: Federal Farm Credit Banks Funding Corporation, Farm Credit System Annual Information Statement and Farm Credit System Quarterly Information Statement, various dates.

Table 12--Farm Credit System financial indicators, as of December 31, 1985-90, and September 30, 1991

Item	1985	1986	1987	1988	1989	1990	1991
Percent							
At-risk capital/total loans 1/	9.86	9.40	8.41	7.64	10.52	11.95	13.80
Percent of loans in nonaccrual status or over 90 days past due	9.26	13.93	10.95	7.31	5.54	5.39	5.25
Other expense/total loans	1.29	1.38	1.51	1.43	1.47	1.46	1.51

1/ At-risk capital includes allowances for losses on acquired property and loans, surplus and unprotected borrower stock and participation certificates, and the FCS Insurance Fund. Prior to 1988 all paid-in borrower stock and participation certificates are considered protected.

Source: Federal Farm Credit Banks Funding Corporation, Farm Credit System Annual Information Statement and Farm Credit System Quarterly Information Statement, various dates.

Farm Credit System Performance Varies Among Districts

Net income and at-risk capital positions generally improve, but nonaccrual loan volume remains unacceptably high in many districts. Assisted districts are performing well.

The FCS institutions that lend directly to farmers include the 11 district Farm Credit Banks (FCB's), the Federal Intermediate Credit Bank (FICB) of Jackson, and the local lending associations. (See the special article on FCS structure for details.) Combined, these institutions account for about 80 percent of FCS assets. Thus, FCS financial performance tends to mirror the aggregate financial performance of these banks and their associations. However, system-level statistics hide differences in performance among FCS districts. The following discussion compares the combined performance of the district banks (the FCB's and the Jackson FICB) and their related associations for the 9 months ending on September 30, 1990, and September 30, 1991.

Total loan volume ranges from \$5.86 billion in the St. Paul district to \$1.73 billion in the Springfield district (table 13). While aggregate loan volume remained flat, the Baltimore, Louisville, and Jackson districts experienced loan volume growth above 4 percent. In the Spokane and Wichita districts, loan volume contracted more than 4 percent from September 30, 1990, to September 30, 1991.

Although district aggregate nonaccrual loans decreased 4.2 percent for the year ending September 30, 1990, such loans continued to account for over 5 percent of overall loan volume. Five of the 12 districts had ratios of nonaccrual loans to total loans exceeding 5 percent, and 3 districts had ratios exceeding 8 percent. In addition, the Springfield, Baltimore, Jackson, St. Paul, and Wichita districts experienced substantial increases in their nonaccrual loan volume. The Omaha, Western, and Spokane districts were able to reduce nonaccrual loan volume markedly.

The most impressive changes in FCS financial statistics achieved in 1991 are the substantial improvements in net income and at-risk capital. At-risk capital measures all resources that can be liquidated without impairing bondholders. Such resources include unprotected borrower stock and surplus as well as allowances for losses on loans and acquired property. All-district net income rose more than 30 percent for the 9 months ending September 30, 1991, compared to a year earlier. All-district at-risk capital and the all-district ratio of at-risk capital to total assets increased more than 16 percent each over the same period.

Although all districts experienced some increase in at-risk capital, some districts did not share the increase in net income (figure 8). Net income declined in the Louisville, Jackson, St. Paul, Wichita, and Texas districts. Decreases in net income in the Louisville, St. Paul, and Wichita districts can be fully explained by a decrease in the level of reversals for previously recognized losses on loans and acquired property. Roughly half the decrease in net income in the Jackson district can also be explained by year-earlier reversals in loss allowances. Thus, current operating income and earnings quality continued to improve in these three districts despite their decline in reported net income. However, half the decrease in net income in Jackson and the entire decrease in net income in Texas can be explained by increases in other operating expenses, including salaries, benefits, and miscellaneous charges.

The ratio of at-risk capital to total assets is a measure of the cushion between stockholders and bankruptcy. This ratio was well over 10 percent for all districts except Spokane, where it was slightly

less by September 30, 1991. Only the Baltimore and Jackson districts failed to increase their at-risk capital-to-asset ratio over the year earlier. However, both districts had comfortable levels of capital.

Assisted Districts Doing Well

Of particular interest is the financial performance of assisted districts. Since 1988, when legislation authorizing financial assistance to distressed FCS institutions was signed, four district banks have received Federal assistance: Omaha, St. Paul, Louisville, and Spokane. These banks are operating under the oversight of the FCS Assistance Board.

By all measures, the assisted districts are performing well, both in absolute terms and relative to districts that did not receive assistance. Taken together, assisted districts had no change in loan volume, while lowering nonaccrual loans almost 4 percent. Nonaccrual loans as a percent of total loans remains high at 7 percent. Of the assisted districts, St. Paul and Spokane have the largest problems with loan quality. Assisted districts experienced strong earnings growth and impressive improvement in the quality of earnings. Net income increased at assisted districts by over 40 percent, and the percent of net income derived from reversals of previously recognized losses fell 78 percent. Finally, the at-risk capital position of assisted districts improved over 23 percent in absolute value and over 27 percent relative to assets. These results indicate assisted districts are making impressive progress and that the Assistance Board is working effectively.

Only the unmerged Jackson district shows a sharp drop in net income without a compensating increase in income quality. Nonaccrual loans show significant increases in some districts, but at-risk capital position improves nationwide.

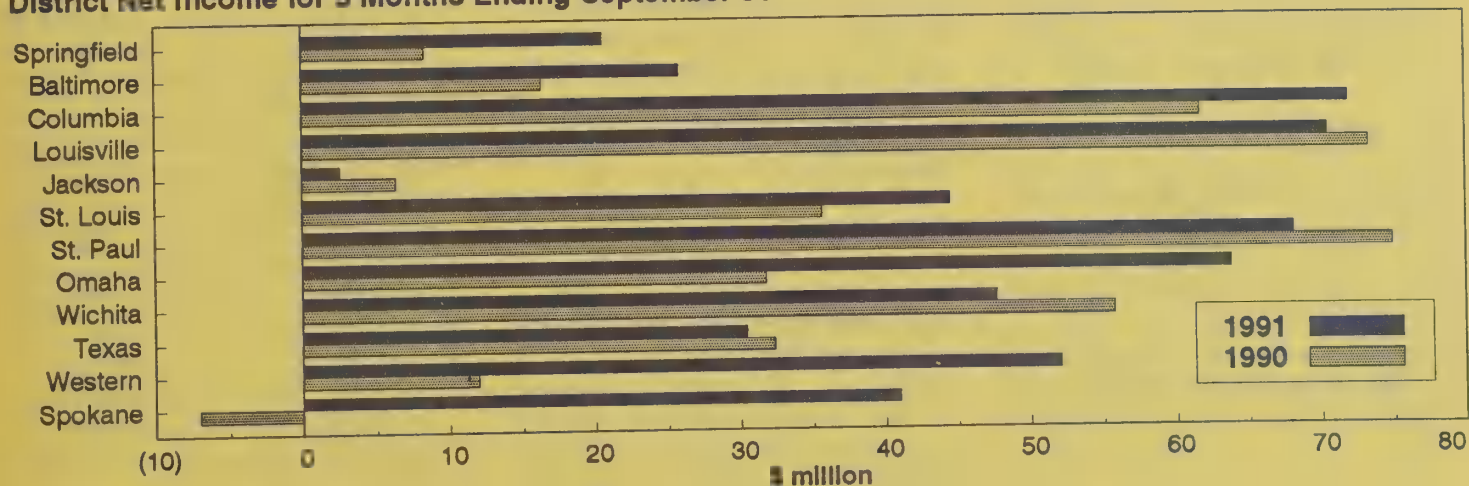
Table 13--Farm Credit System district-level financial statistics

District	Total loans	Nonaccrual loans	Nonaccrual loan share	Net income	Share of income from loss reversals	Total at-risk capital 1/	At-risk capital/assets
	Thousand dollars		Pct.	Thou. dol.	Pct.	Thou. dol.	Pct.
-----Nine months ending September 30, 1991-----							
Springfield	1,731,680	32,677	1.9	20,577	NMF	295,671	13.8
Baltimore	3,380,442	49,124	1.5	25,941	NMF	515,415	13.2
Columbia	4,081,753	178,997	4.4	71,951	NMF	861,640	16.7
Louisville	3,876,882	129,030	3.3	70,514	14.3	672,290	16.0
Jackson	601,641	25,548	4.3	2,642	NMF	106,141	15.8
St. Louis	3,669,531	244,096	6.7	44,463	NMF	585,112	14.3
St. Paul	5,856,471	512,522	8.8	68,118	10.2	903,193	13.7
Omaha	3,896,029	209,227	5.4	63,847	2.1	597,272	14.1
Wichita	3,389,172	129,212	3.8	47,705	16.9	661,923	18.5
Texas	3,818,715	188,148	4.9	37,472	NMF	755,173	16.1
Western	5,202,976	464,564	8.9	52,123	NMF	725,246	12.5
Spokane	2,681,053	319,515	11.9	41,000	3.4	292,191	9.9
All districts	42,186,345	2,482,660	5.9	519,615	NMF	6,988,000	14.6
Assisted districts 3/	16,310,435	1,170,294	7.2	243,479	8.1	2,464,946	13.7
-----Nine months ending September 30, 1990-----							
Springfield	1,680,693	18,147	1.1	8,379	NMF	276,120	13.7
Baltimore	3,115,957	26,657	0.9	16,362	NMF	481,689	13.1
Columbia	4,194,790	174,150	4.2	61,686	NMF	776,778	14.5
Louisville	3,724,674	137,279	3.7	73,271	36.0	582,147	14.4
Jackson	577,519	18,480	3.2	6,438	31.2	103,663	15.7
St. Louis	3,565,501	256,227	7.2	35,700	18.6	470,177	11.2
St. Paul	5,999,781	432,878	7.2	74,954	46.9	728,802	10.5
Omaha	3,777,612	241,262	6.4	31,816	6.6	511,133	12.0
Wichita	3,559,114	112,526	3.2	55,758	32.0	636,085	15.7
Texas	3,778,572	169,347	4.5	32,426	NMF	684,283	13.9
Western	5,284,355	599,783	11.4	12,040	NMF	527,246	8.5
Spokane	2,818,227	405,013	14.4	(7,047)	NMF	173,738	5.3
All districts	42,076,795	2,591,749	6.2	398,425	20.0	5,993,062	12.1
Assisted districts 2/	16,320,294	1,216,432	7.5	172,994	38.1	1,995,820	10.8
-----Percent change, September 30, 1990 to September 30, 1991-----							
Springfield	3.0	80.1	74.8	145.6	NMF	7.1	0.5
Baltimore	8.5	84.3	69.9	58.5	NMF	7.0	0.4
Columbia	-2.7	2.8	5.6	16.6	NMF	10.9	15.6
Louisville	4.1	-6.0	-9.7	-3.8	-60.2	15.5	11.1
Jackson	4.2	38.3	32.7	-59.0	NMF	2.4	0.6
St. Louis	2.9	-4.7	-7.4	24.6	NMF	24.5	28.0
St. Paul	-2.4	18.4	21.3	-9.1	-78.3	23.9	29.6
Omaha	3.1	-13.3	-15.9	100.7	-67.5	16.9	17.9
Wichita	-4.8	14.8	20.6	-14.4	-47.2	4.1	18.0
Texas	1.1	11.1	9.9	-6.0	NMF	10.4	16.0
Western	-1.5	-22.5	-21.3	332.9	NMF	37.6	46.8
Spokane	-4.9	-21.1	-17.1	NMF	NMF	68.2	88.2
All districts	0.3	-4.2	-4.5	30.4	NMF	16.6	20.5
Assisted districts 2/	-0.1	-3.8	-3.7	40.7	-78.7	23.5	27.2

NMF = No Meaningful Figure. 1/ At-risk capital includes allowances for losses on acquired property and loans, surplus and unprotected borrower stock. 2/ Assisted districts include Louisville, St. Paul, Omaha, and Spokane.

Source: Federal Farm Credit Banks Funding Corporation, Summary Report of Condition and Performance of the Farm Credit System, various dates.

Figure 8
District Net Income for 9 Months Ending September 31



Farmers Home Administration Direct Lending and Delinquencies Continue To Decline

Progress continues in restructuring loans and directing new lending away from direct loans.

The role of the Farmers Home Administration (FmHA) in supplying farmers with credit continued to shrink in 1991. As of September 1991, there were 169,747 direct (insured) farm program borrowers (down 10.2 percent from 1990), of which 14.2 percent were delinquent, and another 12.3 percent were in foreclosure, collection, or bankruptcy. Outstanding principal on FmHA's direct farm loans also declined, \$2.1 billion from mid-1990 to mid-1991. The decline can be attributed to reduced new lending volume in these programs, greater loan restructuring activity, loan writeoffs, and overall reluctance on the part of borrowers to increase their indebtedness.

Direct farmer loan program obligations for fiscal 1991 (year ending September 30) dropped to just \$633.7 million (table 14). As recently as fiscal 1985, lending had totaled nearly \$4.8 billion. Operating Loan (OL) program obligations slid \$243 million to \$490 million, while Farm Ownership (FO) program obligations declined to just over \$57 million. Appropriations for both types of loans were reduced significantly in fiscal 1991, resulting in over 99 percent of appropriations being obligated. The timing of FO and OL obligations was steady over the period in question except for the expected spikes occurring in conjunction with seasonal outlays, especially for OL funds. Approximately 38 percent of the insured loan obligations were to first-time borrowers.

Emergency Disaster (EM) program lending receded to \$81 million (13.6 percent of the funds appropriated), down from \$102 million in fiscal 1990. These loans are available to farmers who sustain losses due to adverse conditions that cause the destruction of crops and other property. Weather conditions in 1990 generally improved over 1989, accounting for the decline in EM loans in fiscal 1991. The requirement to

purchase crop insurance was permanently waived via technical amendments made to the 1990 farm bill.

Loan Delinquencies Down

Legal roadblocks established in the mid-1980's slowed FmHA's ability to work through its delinquent loans. However, the last 2 years have shown sizable improvement. At mid-1991, \$5.8 billion in past due principal and interest payments were outstanding, down 12.5 percent from a year earlier (table 15), representing approximately 24,000 borrowers. The share of delinquent loan payments to total loan volume declined to 32.7 percent, suggesting that delinquencies should continue to decline.

The core of loan delinquency problems continues to reside with the EM and the Economic Emergency (EE) loan programs. The EE program, which has not been funded since 1984, provided loans to help farmers overcome economic hardship brought on by credit scarcity or a cost-price squeeze. Most loans under both programs were made from the late 1970's to the early 1980's. Delinquent payments under these programs accounted for \$4.1 billion, or 74.6 percent of the total delinquent FmHA payments at the end of fiscal 1991 (same percentage as in fiscal 1990) (table 16). Of the delinquent EE and EM loan payments, \$3.8 billion has been past due for 4 or more years. About 6,300 borrowers hold these loans, which have proven most difficult to resolve through debt restructuring.

Debt Restructuring Continues

Under rules established by the Agricultural Credit Act of 1987, FmHA continues to restructure loans delinquent for 180 days or more. With the objective of keeping farmers on the farm at the lowest cost to the Government, FmHA uses

preservation loan servicing programs and debt settlement programs to restructure delinquent loan accounts. The pace of restructuring activity declined in fiscal 1991 because regulation changes had to be made to reflect changes authorized by the 1990 Food, Agriculture, Conservation, and Trade Act.

In fiscal 1991, approximately 50,000 borrowers were assisted, contributing to a further decline in total and delinquent loan volume. As of September 30, 1991, 7,677 borrowers had received loan writedowns of \$1.2 billion, while 8,258 had received \$1.7 billion of debt writeoffs when they paid off their loans at the net recovery value.

Loan Writeoffs Remain High

Net writeoffs on FmHA's direct farmer loans decreased from the previous fiscal year to \$2.2 billion in fiscal 1991. The reduced level of losses can be attributed to less foreclosure and debt restructuring activity. Two-thirds of the writeoffs occurred for loans under the EE and EM programs, and with \$4.1 billion in long-term delinquent debt remaining in these programs, direct loan writeoffs will remain high for the foreseeable future.

Value of Inventory Property Falls

The market value of farm real estate property held by FmHA in inventory was \$405 million as of September 30, 1991, \$59 million below the previous year. The average value of inventory property fell 4.2 percent to \$118,978 in fiscal 1991. Four years earlier the value of inventory property was close to \$800 million, with an average value of \$147,164. The 742 properties going into inventory were down from the previous fiscal year's 955. The sale of existing inventory property declined to 1,203 units from the previous year's 1,850, while the average number of months held increased from 39 to 41.

Direct loan obligations decline to \$633.7 million as FmHA beefs up efforts to graduate borrowers from its direct loan programs.

Table 14--Farmers Home Administration farmer program obligations, September 30, 1984, to September 30, 1991

Year 2/	Obligations 1/			Share of total	Outstanding principal of farmer programs 3/
	Total	Direct (Insured)	Guaranteed		
-----Million dollars-----			Pct.	Mil. dol.	
1984	4,438.7	3,995.8	442.9 4/	10.0	26,093.2
1985	5,927.7	4,753.0	1,174.7	19.8	28,817.5
1986	4,367.5	2,807.9	1,569.1	35.9	29,240.4
1987	3,080.5	1,515.0	1,587.4	51.5	28,147.6
1988	2,320.7	1,065.8	1,271.4	54.8	28,242.6
1989	2,229.6	1,030.1	1,199.5	53.8	26,525.6
1990	2,193.2	921.3	1,271.9	58.0	23,684.0
1991	2,124.1	633.7	1,470.4	69.2	21,992.1

1/ Obligations are the dollar amounts of funds loaned or guaranteed, including the dollar amount of interest rate assistance provided on guaranteed loans. 2/ Fiscal years. 3/ Total outstanding principal balance of loans guaranteed by FmHA and direct or insured FmHA loans at yearend. 4/ Includes \$289.9 million in guaranteed Economic Emergency loans.

Source: Farmers Home Administration, 616 Report, 4067 Report, and 205 Report, various issues.

Table 15--Farmers Home Administration direct farmer loan program delinquencies, June 30, 1984, to June 30, 1991 1/

Year	Number of active cases 2/ (caseload)			Principal outstanding		
	Delinquent 3/			Delinquent 4/		
	Total	Total	Proportion	Total	Amount	Share of total
	--- Number ---		Pct.	-- Mil. dollars --		Pct.
1984	446,855	158,237	35.4	25,369.0	5,397.5	21.3
1985	455,561	165,344	36.3	27,786.3	6,384.8	23.0
1986	429,146	157,391	36.7	27,834.6	6,835.2	24.6
1987	396,910	143,270	36.1	26,252.3	7,005.8	26.7
1988	383,571	151,486	39.5	25,395.7	8,749.7	34.5
1989	353,703	136,847	38.7	23,474.6	8,699.7	37.1
1990	305,551	95,915	31.4	19,926.9	6,665.8	33.4
1991	287,105	88,614	31.0	17,827.4	5,834.0	32.7

1/ June 30 of year shown to account for the annual cyclical trend in delinquencies. 2/ Duplicated cases because some borrowers have loans under several different programs. Prior to 1988 active cases excluded those borrowers who are in foreclosure, bankruptcy, or liquidation status. Active cases do not include loans made to associations. 3/ Prior to 1988 a case was considered delinquent when a payment was more than \$10 and 15 days past due. Beginning in 1988, a case is delinquent if a payment is more than 30 days past due. 4/ Amount delinquent includes past due principal and interest payments.

Source: Farmers Home Administration, 616 report, various issues.

Table 16--Farmers Home Administration direct farmer loan program delinquencies by program, September 30, 1991

Direct farmer programs	Number of active cases 1/ (caseload)			Principal outstanding		
	Delinquent 2/			Delinquent 3/		
	Total	Total	Proportion	Total	Amount	Share of total
	---Number---		Pct.	--Mil. dollars--		Pct.
Farm ownership (FO)	96,171	17,222	17.9	6,022.4	433.6	7.2
Farm ownership -- nonfarm enterprises	852	174	20.4	33.6	3.6	10.7
Operating loans -- excluding youth (OL)	82,241	27,424	33.4	3,843.4	923.3	24.0
Operating loans -- youth	834	141	16.9	3.2	0.7	21.9
Emergency disaster (EM)	64,167	21,951	34.2	5,296.2	3,241.4	61.2
Economic emergency (EE)	26,030	10,050	38.6	2,069.1	868.5	42.0
Recreation	123	32	26.0	7.8	1.6	21.0
Soil and water	10,110	2,210	21.9	189.7	34.8	18.3
Total	280,528	79,204	28.2	17,465.5	5,507.5	31.5

1/ Duplicated cases because some borrowers have loans under several different programs. Active cases do not include loans made to associations. 2/ A case is considered delinquent when a payment is more than 30 days past due. 3/ Amount delinquent includes past due principal and interest payments.

Source: Farmers Home Administration, 616 report for September 30, 1991.

Farmers Home Administration Guaranteed Lending Grows

Guaranteed loan programs' growth slow but steady.

Guaranteed loan obligations totaled \$1.5 billion in fiscal 1991, up 15.4 percent from the previous year (table 17), and the second year-to-year increase since fiscal 1987. Guaranteed loans accounted for a record 69.2 percent of FmHA's total farmer program obligations as both appropriations and obligations for direct lending decreased.

Despite greater use of guarantees, lenders for the most part remain disinterested. At the end of fiscal 1991, FmHA had guarantees on \$4.5 billion in loans held by an estimated 40,000 farmers doing business with over 10,000 commercial lenders. The average loan per borrower was \$113,000, with each participating bank providing guarantees for only 4 farmers. Only 39.9 percent of guaranteed operating loan authority and 35.4 percent of guaranteed farm ownership authority were obligated during the fiscal year. Guarantee obligations are the amount of loan principal that FmHA has agreed to insure for repayment to the lender.

Guarantee Programs

The switch from direct to guaranteed lending was made on the assumption that private sector lenders could better evaluate the financial viability of a borrower's farm operation. First authorized in the Food Security Act of 1985 and then further developed in the Food, Agriculture, Conservation, and Trade Act of 1990 and the Omnibus Budget Reconciliation Act of 1990, loan guarantee use was encouraged by elevating the interest rate subsidy available on guaranteed loans, making allowances for partial liquidation by lenders in the event of default, and strengthening the secondary market for these loans.

Interest Rate Buydowns Increase

Obligations under the Interest Rate Assistance program (formerly Interest Rate Buydown) increased from the

\$13.9 million obligated in 1990 to \$83.8 million in fiscal 1991. All new guaranteed farm loans and existing FO and OL loans are now eligible for the Interest Rate Assistance program. The program was changed in the 1990 Act to provide greater assistance to current guarantee program borrowers, promote graduation of direct program borrowers to guaranteed credit, and increase participation in guarantee programs among lenders.

Under the adjusted program, which began in fiscal 1991, FmHA covers the cost of an interest rate writedown up to a maximum of 4 percentage points. Also, the 3-year limitation on interest rate assistance has been extended to cover 10 years or the term of the loan, whichever is less.

Delinquency Rates and Losses Remain Stable

Outstanding principal on guaranteed loans continues to rise, reaching over \$4.5 billion on September 30, 1991 (table 18). However, delinquent payments on guaranteed loans remain small compared to the direct lending programs. Delinquent loan payments represented only 1.3 percent of total guaranteed loan volume at fiscal yearend, but over 31.5 percent of the direct loan portfolio. As with the direct loan portfolio, emergency loans have the highest delinquency rates among guaranteed loans (table 19). The emergency programs have not been funded since the early 1980's.

FmHA losses on guaranteed farm loans declined in fiscal 1991 to \$51.6 million. Losses suffered on defaulted guaranteed loans remained small compared with the direct lending program losses. This was because the majority of guarantees were relatively new, fewer were made for emergency purposes, participating lenders must incur some of the default risk, and the average borrower in the

guarantee program tends to be more creditworthy than the direct loan borrower.

Outlook for FmHA

FmHA's direct farm loan portfolio should continue to dwindle in 1992 as loan writeoffs mount and new lending activity remains low. Outstanding volume on direct loans at the end of fiscal 1991 stood at \$17.5 billion. If the trend in paying down loans continues in 1992, yearend volume should be around \$15 billion. Delinquency rates in 1992 will continue downward; however, delinquencies of 31 to 180 days increased slightly in 1991 from 1990, but not enough to suggest a change in trend.

Loan funds for the direct FO and OL programs should be ample throughout fiscal 1992. Annual apportionments for direct FO loans have been increased from \$57.2 million to \$66.75 million and from \$493.3 million to \$850 million for direct OL. Both of these programs were used to near capacity in 1991. Barring a major natural disaster, such as widespread drought, ample funds should be available from the Emergency Disaster loan program to handle 1991 and 1992 weather-related problems.

Appropriations have been reduced for guaranteed FO loans from \$1.03 billion to \$489.25 million, which is more in line with actual obligations in fiscal 1991. As a result of the changes made in the Interest Assistance program, use of subsidized guarantees increased substantially. Funding for this program was increased from \$98 million in 1991 to \$300 million this year.

FmHA will continue to shift direct loan programs to guaranteed loan programs. Furthermore, greater effort will be made to funnel direct lending to beginning farmers and programs designed to give equal access to farm ownership.

The outstanding volume of FmHA's guaranteed farm loans increased \$387 million in fiscal 1991, 9.3 percent over the previous year.

Table 17--Farmers Home Administration major farmer program lending authority and obligations, fiscal 1991

Program	Lending authority 1/	Obligations 2/
-- Thous. dollars --		
Farm ownership (FO)		
Direct	57,200	57,139
Guaranteed	1,033,300	365,512
Operating loans (OL)		
Direct	493,300	489,909
Guaranteed	2,604,700	1,040,555
Emergency disaster (EM)	599,992	81,454
Interest rate buydown program	98,000	83,796

1/ Budgetary limits on the volume of new loans that can be issued during the year. 2/ Actual amount of lending authority committed to new loans or loan guarantees.

Source: Farmers Home Administration.

Table 18--Farmers Home Administration guaranteed farmer loan program delinquencies, September 30, 1984, to September 30, 1991

Year 1/	Number of active loans			Principal outstanding		
	Delinquent			Delinquent 2/		
	Total	Total	Proportion	Total	Amount	Share of total
	--- Number ---		Pct.	-- Mil. dollars --		Pct.
1984	4,111	235	5.7	484.2	16.2	3.3
1985	7,160	313	4.4	834.5	19.3	2.3
1986	15,137	723	4.8	1,664.5	31.4	1.9
1987	23,558	1,106	4.7	2,384.0	42.6	1.8
1988	35,746	1,388	3.9	3,177.6	54.1	1.7
1989	38,840	1,733	4.5	3,243.7	60.6	1.9
1990	48,605	1,880	3.9	4,139.8	58.5	1.4
1991	52,299	2,170	4.2	4,526.6	59.3	1.3

1/ September 30 of year shown. 2/ Amount delinquent includes past payments of principal and accrued interest.

Source: Farmers Home Administration, 4067 report, various issues.

Table 19--Farmers Home Administration guaranteed farmer loan program delinquencies by program, September 30, 1991

Guaranteed farmer programs 1/	Number of loans			Principal outstanding		
	Delinquent			Delinquent 2/		
	Total	Total	Proportion	Total	Amount	Share of total
	---Number---		Pct.	-Mil. dollars-		Pct.
Farm ownership	11,277	496	4.4	1,520.3	15.1	1.0
Operating loans	40,463	1,556	3.9	2,941.2	34.7	1.2
Emergency loans	5	1	20.0	0.3	0.4	133.0
Economic emergency	535	111	20.1	62.2	8.5	13.7
Emergency livestock	19	6	31.6	2.7	0.5	18.5
Total	52,299	2,170	4.2	4,526.6	59.3	1.3

1/ Emergency, Economic Emergency, and Emergency Livestock guaranteed loan programs are currently not being funded. 2/ Amount delinquent includes past due payments of principal and accrued interest.

Source: Farmers Home Administration, Report 4067 for September 30, 1991.

Life Insurance Company Farm Loan Portfolios Improve

Loan delinquency and foreclosure levels are the lowest since the mid-1980's. The outlook for 1992 is generally favorable.

Historically, agricultural real estate mortgages have been an important life insurance company investment and a key source of farm real estate loan funds. Approximately 30,900 agricultural mortgage loans were held by about 12 life insurance companies on June 30, 1991. During 1991, the quality of agricultural mortgage portfolios of life insurance companies generally continued to improve.

Delinquencies Have Declined from Mid-1980's Peaks

Delinquency rates based on the number of loans held by life insurance companies were lower for agricultural mortgages than for nonagricultural loans throughout the 1970's. The agricultural delinquency rate surpassed the nonagricultural rate in June 1981 and has done so continuously since June 1982 (table 20). The June 1987 agricultural mortgage delinquency value of 9.12 percent was the highest recorded since the American Council of Life Insurance initiated its survey in 1954. Agricultural loan delinquency has declined to 3.55 percent, still in excess of the rising rate for nonagricultural mortgages.

The delinquency rates on the volume of loans outstanding are higher for agricultural mortgages than nonagricultural loans despite the growing problems with urban commercial real estate. The percent of agricultural mortgage debt that is delinquent has exceeded the nonagricultural rate since June 1978. The share rose to a record 19.85 percent in June 1986 but declined to 6.35 percent by June 1991 (table 20). Some \$591 million of life insurance company agricultural mortgage debt was delinquent on June 30, 1991.

Foreclosures Down from Earlier Highs

Agricultural mortgage foreclosure rates by number of loans have exceeded non-

agricultural rates since June 1979, and stood at 1.26 percent in June 1991 (table 21), down from the record high 3.91 percent 4 years earlier. A total of 388 life insurance company agricultural mortgage loans were in the process of foreclosure on June 30, 1991, down from the 1,915 on June 30, 1986.

Agricultural mortgage foreclosure rates by dollar amount of loans outstanding have exceeded nonagricultural rates since June 1978 and reached record levels in the 1980's (table 21). On June 30, 1986, a record 8.23 percent of the amount outstanding was in the process of foreclosure, but by June 30, 1991, it had declined to 2.45 percent. A total of \$227.3 million in life insurance company farm mortgage loans was in the process of foreclosure on June 30, 1991, down from \$408.7 million 2 years earlier.

The number and dollar amount of agricultural and nonagricultural loans actually foreclosed during 1980-91 are shown in table 22. Agricultural mortgage foreclosures rose each year of the 1980's until 1986 when they peaked at \$827.5 million. During 1982-85, the dollar amount of agricultural mortgage foreclosures even exceeded that for nonagricultural mortgages. Life insurance company agricultural loan foreclosures during 1980-90 totaled \$3.58 billion, with 57.2 percent occurring during 1985-87. Completed agricultural foreclosures declined from \$204.4 million in 1989 to \$85.3 million in 1990, and to \$31.0 million for the first half of 1991, compared with \$42.1 million recorded in that same period of 1990.

Outlook Is Generally Favorable

The many adjustments of the 1980's led to financially sounder farm loan portfolios. There will be opportunities in 1992 for life insurance companies to make profitable farm mortgage loans, but the competition for the better-quality

loans will be keen. Insurance companies will continue to view agricultural lending with considerable variation. Most companies continue to have an ample supply of loanable funds and are aggressively competing on rate, terms, and loan-to-value ratio. Except in areas with weather problems, continued financial progress is expected.

In 1992, life insurance companies will continue to differ in aggressiveness in seeking new loans. Some, stung by earlier problems, will continue to avoid the market. Other firms will offer funds only for renewals or increases of existing good loans. Some will continue to make loans more for agribusiness and timber activities at the expense of traditional production agriculture lending. Those companies active in the market will report that available funds exceed qualified agricultural applications.

The post-1981 decline in farm debt held by life insurance companies (8 of the past 10 years saw decreases) ended in 1991 with a 6.2-percent increase. Total life insurance company farm loans outstanding are projected to increase slightly in 1992. Most of the increased lending will consist of relatively large loans in selected States rather than being distributed evenly nationwide.

Several emerging issues will shape future life insurance lending practices. These include, in addition to farm borrower profitability resulting from many factors: (1) the practices of competing lenders; (2) volatility of interest rates and capital availability; (3) the ongoing efforts of the agricultural lending industry in moving toward improved, standardized financial reporting standards; (4) the degree of success of the Farmer Mac secondary mortgage loan process; and (5) the risks associated with environmental concerns and weather.

Life insurance farm loan delinquency and foreclosure rates continue to improve as the loan portfolio strengthens.

Table 20--Life insurance company mortgage loan delinquencies, 1985-91 1/

End of month	Rates by number of loans		Rates by amount	
	Nonagricultural mortgages	Agricultural mortgages	Nonagricultural mortgages	Agricultural mortgages
--- Percent ---				
1985 June	1.15	6.26	1.02	14.89
Dec.	1.43	6.34	1.16	15.06
1986 June	1.33	9.08	1.91	19.85
Dec.	1.64	8.30	2.65	17.01
1987 June	1.46	9.12	2.96	18.01
Dec.	1.60	6.83	2.61	14.31
1988 June	1.53	6.75	2.77	13.27
Dec.	1.74	4.44	2.44	8.87
1989 June	1.55	4.68	2.75	8.65
Dec.	1.68	2.68	2.37	4.74
1990 June	1.87	3.41	2.94	5.26
Dec.	2.10	2.40	3.60	4.22
1991 June	2.30	3.55	5.25	6.35

1/ Delinquent loans (including loans in the process of foreclosure). A delinquent loan is a nonfarm mortgage with interest payments in arrears at least 2 months (60 days if other than a monthly pay) or a farm loan with interest in arrears more than 90 days.

Source: American Council of Life Insurance, Investment Bulletin, various issues.

Table 21--Life insurance company mortgage loans in the process of foreclosure, 1984-91 1/

End of month	Rates by number of loans		Rates by amount	
	Nonagricultural mortgages	Agricultural mortgages	Nonagricultural mortgages	Agricultural mortgages
--- Percent ---				
1985 June	.17	2.16	.28	6.00
Dec.	.21	2.86	.31	7.11
1986 June	.25	3.42	.69	8.23
Dec.	.29	3.84	.84	7.83
1987 June	.37	3.91	1.11	7.98
Dec.	.41	3.02	1.07	6.43
1988 June	.46	3.36	1.16	6.33
Dec.	.45	2.60	1.22	4.83
1989 June	.43	2.35	1.38	4.67
Dec.	.43	1.30	1.29	2.28
1990 June	.46	1.31	1.56	2.23
Dec.	.51	1.13	1.71	1.91
1991 June	.58	1.26	2.39	2.45

1/ Reporting companies account for approximately 80 percent of the mortgages held by U.S. life insurance companies depending on the date of the survey. Loans in foreclosure include those on which foreclosure action has been authorized, including any involved in a subsequent filing of bankruptcy. Beginning in 1988, the loans in foreclosure category includes loans in redemption period.

Source: American Council of Life Insurance, Investment Bulletin, various issues.

Table 22--Life insurance company mortgage loans foreclosed, 1980-91 1/

Year	Nonagricultural mortgages		Agricultural mortgages	
	Number	Thou. dollars	Number	Thou. dollars
1980	549	63,237	26	18,160
1981	552	58,491	47	55,741
1982	760	131,392	167	170,310
1983	868	114,993	306	347,002
1984	1,024	242,428	475	289,251
1985	1,033	328,558	1,000	530,235
1986	1,541	1,143,082	1,654	827,472
1987	2,048	1,580,027	1,515	691,914
1988	1,196	2,530,105	727	364,414
1989	1,098	2,178,949	356	204,361
1990	1,018	3,042,171	122	85,281
1991 2/	644	2,367,480	52	31,020

1/ Loans foreclosed include those for which title to the property or entitling certificate was acquired during the period shown, either through foreclosure or voluntary conveyance in lieu of foreclosure. Dollar amounts include principal outstanding at the time of the foreclosure, amounts capitalized for interest, foreclosure costs and any advances made to protect the collateral. 2/ January 1 through June 30.

Source: American Council of Life Insurance, Investment Bulletin, various issues.

Farmer Mac I Begins Operation

New legislation gives a boost to the fledgling secondary market for farm real estate and rural housing loans, but hurdles remain.

The Federal Agricultural Mortgage Corporation (Farmer Mac) was authorized to operate a secondary market for farm real estate and rural housing loans 4 years ago by the Agricultural Credit Act of 1987. In December 1991, Farmer Mac finally guaranteed its first loan pool, signaling the start of this financial innovation for agriculture.

The pool totaled \$112 million and was organized by the John Hancock Mutual Life Insurance Company. John Hancock pooled a portion of its current farm loan portfolio and issued Farmer Mac guaranteed securities, which it elected to hold in portfolio. Most of the loans pooled were under \$1 million and had been performing for at least 5 years.

Two other life insurance companies, Equitable Agri-Business and Prudential Agricultural Credit, became certified poolers late in 1991. These three companies join the Manufacturers Hanover Securities Corporation and the Goldman Sachs Mortgage Company as certified poolers for Farmer Mac.

Farmer Mac Development Stymied

The long awaited start of the Farmer Mac I market has been stymied by structural and economic factors. One cause is a weak demand for farm real estate financing. Unlike a decade ago when farmers eagerly took on new debt, farmers are now cautious about assuming liabilities, and continue to shed debt accumulated from past years. It is estimated that annual farm real estate lending volume by the FCS, commercial banks, and life insurance companies is half that of a decade ago.

Also, with improving farm incomes in recent years, less credit is needed to finance purchases. Surveys indicate that debt is incurred on only two-thirds of farmland transfers, down from 90 percent 10 years ago.

With weak loan demand and today's tighter lending standards, many agricultural banks now hold fewer loans than they consider desirable. Loan-to-deposit ratios for agricultural banks, a common measure of liquidity, averaged 56.3 percent in mid-1991, well below the preferable 65- to 70-percent range. Without a need to increase liquidity, the incentive for agricultural banks to sell loans into a secondary market is muted. Bankers' incentive to sell loans was also reduced when regulators required banks to hold capital against the full value of farm loans sold through Farmer Mac I.

Another problem confronting Farmer Mac has been a weak demand for the long-term fixed-rate loan product it initially promised. A steeply upward sloping interest rate curve in recent years has meant that short-term variable-rate loans offer farmers lower cost financing than long-term fixed-rate loans.

The structure of the Farmer Mac market is more difficult to implement than initially believed. Poolers are required to initiate the market by pooling loans, applying for a Farmer Mac guarantee, and then issuing securities. Uncertain over the potential size of the market and unfamiliar with the process and costs of packaging agricultural loans into securities, poolers have been slow or reluctant to begin operation. Setting up the originator network needed to collect and pool qualified loans has been time consuming.

Early analysis indicated that Farmer Mac poolers would have difficulty offering price-competitive products to lenders and farmers alike under its original structure. Also, setting up Farmer Mac took 2 years, which dampened some of the early enthusiasm.

Expanded Operating Structure

To hasten Farmer Mac's development, Congress in November expanded the

market's operating structure. The Food, Agriculture, Conservation, and Trade Act Amendments of 1991 gave Farmer Mac the explicit authority to purchase senior securities or obligations backed by qualified loan pools and to finance these purchases by selling its own securities. This allows Farmer Mac to operate more like Fannie Mae and Freddie Mac—the successful secondary markets for housing mortgages.

Farmer Mac had proposed this approach, referred to as the linked portfolio strategy (LPS), for Farmer Mac I earlier in the year, but did not implement it because the Farm Credit Administration (FCA), its regulator, said Farmer Mac's charter did not permit such activities.

The 1991 Act provides new market structures for Farmer Mac, strengthens FCA's oversight power, and imposes new capital standards on the fledgling corporation. Congress established the Office of Secondary Market Oversight within FCA to provide for the examination and general supervision of the safe and sound performance of Farmer Mac.

New Capital Standards

To ensure financial safety and soundness, the legislation defines three levels of capital for Farmer Mac: critical, minimum, and regulatory. Regulatory capital will be determined by a risk-based capital stress test to be developed by the Oversight Office within 2 years. The other two levels impose core capital ratios on balance sheet assets, the outstanding principal balance on Farmer Mac guaranteed securities, and assets acquired under the LPS.

The legislation specifies four capital enforcement levels that the Oversight Office must implement by mid-1994. To avoid regulatory enforcement action, Farmer Mac must maintain regulatory capital above risk-based capital (level I). If regulatory capital is not main-

tained, Farmer Mac is placed into level II and if the minimum core capital standard is not met it is placed into enforcement level III. The corporation is considered to be in level I for the first 30 months as long as minimum capital is maintained. There is an 18-month phase-in period for meeting the minimum capital standard.

If capital falls below the critical standard, Farmer Mac would be placed into enforcement level IV. As capital falls from levels I to IV, the Oversight Office's discretionary regulatory power over the corporation increases to ensure that capital returns to compliance with level I.

Outlook More Favorable

With its new authority to buy and sell securities and with the certification of five poolers, the prospect for greater Farmer Mac I volume is more promising. The LPS should provide more flexible and viable products to the marketplace.

The new structure should allow for cost savings because Farmer Mac can often sell securities at more favorable rates than private poolers due to its agency status. These savings have been demonstrated in the Farmer Mac II market, where discount notes sold to investors carry interest rates with narrow spreads over comparable term U.S. Treasury notes. The LPS might permit smaller loan pools to be assembled, which could reduce costs associated with warehousing loans.

Under the LPS option, Farmer Mac closely matches terms and rates on its debt obligations offered through a subsidiary with the mortgage-backed securities being purchased from the pooler. Interest rates and terms on loans in the pools also must be tied to Farmer Mac's debt obligations via a cost of funds index. By matching securities closely, Farmer Mac hopes to minimize interest rate risk. This approach also allows Farmer Mac to manage prepayment risks for loan pools carrying interest rate reset periods of 1 year or less. For intermediate- and long-term fixed rate loans, Farmer Mac would likely require prepayment guarantees from the pooler or borrower. However, if market conditions permit, it could issue callable bonds to minimize prepayment risks.

Poolers are developing programs to collect qualified loans from originators. Some life insurance companies have been purchasing whole loans and not just the unsubordinated 90-percent portion. For banks, this approach removes the loan totally from its balance sheet, relieving it from holding capital but still allowing it to earn servicing income.

Farm lenders are likely to be early buyers of Farmer Mac guaranteed securities because they are most familiar with farm mortgage assets. Also, these sales can be made on a private placement basis, which lowers transaction costs. As evident in the first pool, existing loans will likely dominate early loan pools. Farmer Mac relaxes its underwriting standards somewhat for loans that have been performing for 5 years

and have a loan-to-value ratio of 60 percent or less.

Boosting the market's prospects this year would be a rise in loan demand or a rise in interest rates that encourages farmers to refinance variable rate loans by locking current low rates with longer-term fixed rates offered through Farmer Mac poolers.

The market still faces obstacles. While some poolers may be willing to purchase whole loans, commercial banks must hold capital against the full value of the farm loan sold if they must absorb the first 10 percent of loss on any defaulted loan. The 10-percent requirement greatly lowers the profit potential of a loan sale.

Although low interest rates and steady farm incomes may increase farm loan demand somewhat in 1992, the liquidity of agricultural banks should remain high, so the incentive to sell loans will likely remain weak. Also, many lenders and farmers remain unfamiliar with the Farmer Mac market and poolers are still learning how to best securitize farm loan assets. Interest in pooling rural housing mortgages remains dormant.

While Farmer Mac has passed its first hurdle, its influence on agricultural credit markets is expected to develop only slowly. Ultimately, the Farmer Mac market must demonstrate it can offer loan products that are innovative and competitive with those offered through other sources, especially the Farm Credit System.

Farmer Mac II Volume Grows Slowly

New financing plan boosts market.

Farmer Mac II issued its first securities backed by FmHA guaranteed loans in April 1991 in the amount of \$1 million. Through 1991, \$10.8 million in loans were sold through the secondary loan market. FmHA guaranteed \$1.4 billion in new farm loans during fiscal 1991 and had \$4.5 billion in loan guarantees outstanding at year's end.

Under the Farmer Mac II program, lenders sell the FmHA guaranteed portion of operating loans (OL) or farm ownership (FO) loans with maturities of at least 1 year in the secondary market. (Farmer Mac serves as the pooler for this market.) Lenders can swap these loans for a marketable security or sell them for cash. The market offers lenders an opportunity to minimize interest rate risk, and increase liquidity, lending capacity, and returns.

If sold for cash, lenders receive the par value of the loan and a "management premium" for the difference between the net yield (the rate investors receive from purchasing the loan or pool of loans) and the contractual loan interest rate the borrower pays. The premium is paid over the term of the loan. Lenders also retain the right to earn loan servicing fee income. The net yield for a loan is determined by Farmer Mac and includes certain transaction and servicing fees. Interest rate indexes, such as the Wall Street Journal Prime Rate and U.S. Treasury constant maturity indexes for fixed rate full amortization loans, are used to calculate the loan's net yield and hence the lender's management premium.

New Financing Option Announced

In May 1991, a cost of funds index (COFI) for the Farmer Mac II program was introduced. Under this LPS financing option, Farmer Mac regularly sells discount notes to create a COFI, which lenders use as the base interest rate for floating rate loans. Because of Farmer Mac's agency status and the Federal guarantee backing Farmer Mac II securities, the COFI is lower than other commonly used base interest rates, such as the Prime Rate. By pegging to the COFI rate, the net yield to investors is reduced, which increases the annual management premium lenders receive or lowers the rate the borrower pays if the lender elects to pass on some or all of the savings.

Despite the advantages of this option, it has seen only limited use so far. Loans tied to the Prime Rate or a fixed rate have seen more activity in the market. Through the end of the year, swaps were popular among participating lenders. A swap offers commercial banks the opportunity to convert a loan into a liquid security asset that can be more readily sold. Transactions generally have been completed on a private placement basis.

Loans sold or swapped have generally ranged from \$100,000 to \$200,000 in size. Volume has roughly been split between OL and FO programs. Guarantees are capped at \$400,000 for OL and \$300,000 for FO qualifying loans. So far, banks and life insurance companies have been purchasing the loans or loan-backed securities because they are most

familiar with the economics of a farm loan.

Slow But Increasing Growth Expected

Even with the more profitable COFI option, the volume of guaranteed loans sold into the market should grow only slowly in 1992. This is because many of the same economic conditions impeding development of Farmer Mac I, such as high lender liquidity, also affect the Farmer Mac II market. Educating existing and prospective FmHA guaranteed lenders about the advantages of participating in the Farmer Mac II market remains a challenge. In addition, acceptance of the COFI and conversion of existing loan contracts to the index takes time.

Another factor affecting market volume is the pace of guaranteed lending. Adoption of the guaranteed loan program by lenders has been on the rise, but use has been spotty. Lenders cite cumbersome paperwork and slow approval times on guaranteed loans as impeding wide use of the programs. Farmer Mac has recognized this problem and introduced computer software that completes the documentation requirements for Farmer Mac II and helps complete the application for an FmHA loan guarantee.

Volume will also be limited by the fact that the largest guaranteed farm loans are for annual operating expenses, which frequently mature in a year or less. Also, many of these loans are lines of credit, which are not eligible for the market.

Future Brighter for Agricultural Lenders

The agricultural recovery and falling interest rates have enabled agricultural lenders to post strong gains, while banking legislation continues to focus on protecting existing markets and institutions rather than foster efficiency and competition.

Farm lenders have recovered substantially from the financial turmoil of the early to mid-1980's. Although farm debt has dropped by \$55 billion since its 1984 peak, farm lenders are posting near-record earnings due to a favorable interest rate environment and improving loan portfolio quality. The sounder financial condition of the agricultural sector ensures a less tumultuous period for lenders despite increased uncertainty about agricultural prices and government support. In addition, Congress has reregulated the financial sector without promoting competition. As a result, the banking industry has avoided the instability that often accompanies increased competition.

Agricultural Sector Still Faces Rising Risks

Increased price uncertainty on agricultural commodities arises from a number of factors. The fall of the communist regimes in the former USSR and Eastern Europe raises questions about the ability of those countries to pay for food imports and their potential as agricultural exporters. The end of the Uruguay round of GATT negotiations is approaching with uncertain prospects for liberalizing trade in agricultural commodities. Failure to do so could dampen markets for U.S. agricultural trade and heighten the volatility of farm income.

The Food, Agriculture, Conservation, and Trade Act of 1990 froze commodity program prices and reduced acreage eligible for program payments, but provided farmers with greater planting flexibility opportunities. Over time this will tend to increase the variability of farm income.

The agricultural recovery came at great expense to the Federal Treasury, with

farm commodity programs alone costing over \$133 billion for the decade. Given Federal budgetary constraints, broad, unfocused aid is less likely to be available when the next shock threatens farm incomes and asset values. The FmHA, which financed thousands of distressed farmers in the 1980's, has fewer resources in the 1990's. Although FmHA's authority to guarantee loans has increased, direct lending authority has been substantially cut. These two types of assistance are imperfect substitutes.

For farm lenders, these changes increase the likelihood that any individual borrower may experience extremely low income in a given year. Consequently, prudent lenders will tighten underwriting standards and will be less likely to extend new credit if a borrower's financial position erodes.

Bank Reform Leads to Reregulation and Market Protection

Agricultural lenders are facing a rapidly changing business environment as well. Major structural changes in financial institutions are possible. Two FCS districts have agreed to merge and others may follow. Congress has not dealt with the sticky issue of bank reform (see special article), but passage of the Federal Deposit Insurance Corporation Improvement Act (FDICIA) has important implications for the future of agricultural lending. The private insurance industry, which holds nearly 12 percent of farm real estate debt, is experiencing financial difficulties and has been consolidating.

In passing the FDICIA, Congress was motivated by the weakened condition of commercial banks, the high costs of rescuing failed institutions, and the dwindling of the federally backed deposit

insurance fund. The resulting legislation substantially increases the cost of deposit insurance to banks and the burden of regulation. The net effect will be to weaken the competitive position of commercial banks relative to other lenders. However, the burden of the FDICIA falls proportionately less on the small banks that tend to serve agriculture. Thus, the competitive position of farm banks is improved relative to other banks, but hurt relative to their nonbank competition. Luckily for commercial banks, both insurance companies and the Farm Credit System are preoccupied with improving their capital position rather than enhancing price competition in farm loan markets.

Bank reform proposals that threatened the competitive position of small rural and farm banks have been successfully blocked by coalitions of independent bankers, insurance companies, brokerage firms, and consumer groups. These proposals included removing restrictions on interstate banking and branching, broadening bank powers to underwrite insurance and sell securities, allowing the purchase of banks by nonbank firms, and limiting deposit insurance. The interstate banking proposals, in particular, held potential to increase the competition for loans in rural credit markets.

Two developments do hold the potential to increase competition in the market for farm real estate loans. Farmer Mac, the new secondary market for farm real estate loans, may increase competition by encouraging new entrants into rural lending markets, and lenders are beginning to adopt recommendations of the Farm Financial Standards Task Force. Uniformity of financial standards will lower underwriting costs and foster greater competition by making it easier for farm borrowers to comparison shop.

Bank Reform?

by

Douglas G. Duncan ¹

Abstract: This special article identifies key provisions of the Federal Deposit Insurance Corporation Improvement Act of 1991 that affect agricultural banks. The most important sections of the bill are those that (1) recapitalize the Bank Insurance Fund by expanding its borrowing power, (2) attempt to narrow the "too-big-to-fail" policy of regulators, and (3) increase regulation of bank activities in order to increase "safety and soundness" of insured banks. Agricultural banks are in an improved position relative to other banks under this legislation. However, the banking sector may see less regulated, nonbank financial firms supplant them through disintermediation (outflow of deposits).

Keywords: Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), Bank Insurance Fund (BIF), agricultural banks.

A number of changes took place in the 1980's that had an impact on the banking environment and led to a need for bank reform. First, the revolution in financial market structure involving financial innovation; second, interest rates payable on bank deposits were deregulated in response to disintermediation; and third, technological advancement greatly increased competition for banks.

The increased competition decreased financial returns to banks. Because the fee structure of the Federal deposit insurance system was unrelated to a bank's propensity to take risks, lower returns on traditional activities led banks to seek higher returns on riskier activities. At the same time, deposit insurance protected depositors from the consequences of their banks' risk-taking, removing an important check on bank activity.

Ultimately, the increase in competition, along with greater risk-taking, spawned bank failures. Regulation and supervision were also inadequate at the time. Better regulatory oversight by the Federal Deposit Insurance Corporation (FDIC), the Office of the Comptroller of the Currency (OCC), the Federal Reserve Board (FRB), and State banking authorities might have provided some compensation for the lack of depositor monitoring.

In 1991, Congress reacted strongly to the potential of a commercial banking version of the taxpayer bailout of the savings and loan industry by enacting the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), PL 102-242. This legislation allowed the FDIC to borrow \$75 billion from the Federal Financing Bank (an arm of the Treasury Department), with the proviso that the banking industry be responsible for repayment of the loan. The Act also required many new regulatory actions to be instituted in an effort to stop bank failures and restore the viability of the Bank Insurance Fund (BIF). Legislation did not, however, institute bank reform. This article will detail important provisions of the FDICIA, with a particular effort to highlight those sections affecting agricultural banks.

Rescuing the Bank Insurance Fund

With the spectre of the savings and loan industry bailout in the air, the top priority in the bank reform discussion was shoring up the BIF, which the FDIC uses to cover the losses from closing failed banks. The spate of bank failures in the 1980's and early 1990's that led to the near depletion of the BIF after more than 50 years of operation, was, in part, related to how Federal deposit insurance was structured.

Agricultural banks, currently healthier than either small nonagricultural or large banks, comprised 350 of 1,320

commercial bank failures between 1980 and 1991. However, farm bank failures have declined since 1987. Therefore, they are not currently a major factor in the BIF's decline. But, the reestablishment of farm bank health will not exempt them from paying a portion of the cost of recapitalizing the BIF, nor will agricultural banks escape the impact of alterations in the deposit insurance system.

To allow for the timely closure of failing banks, the FDICIA granted the BIF the authority to borrow \$30 billion. Analysts agreed that failure to recapitalize the BIF by the end of 1991 would certainly have brought insolvency, making it impossible for the FDIC to close failed banks.

In addition to the BIF, the FDIC requires a working capital fund. Working capital is used to facilitate the actual closure of banks and is repaid through the sale of assets acquired from failed banks. The amount that recoveries fall short of outlays constitutes the loss covered by the BIF. The FDIC borrowing authority for working capital is \$45 billion. Thus, total FDIC borrowing authority is \$75 billion.

A provision was included in the FDICIA for the FDIC to borrow from insured banks. This would be done through the issuance of securities, which banks would purchase and record on their financial statements as assets. The FDIC has not indicated whether or not it intends to utilize this authority.

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The Assessment Base

Borrowings not repaid through the sale of failed-bank assets are to be repaid with assessments on the domestic deposits of insured banks. The assessment base for deposit insurance has changed several times since its inception. The Banking Act of 1933 called for the base to include *all insured deposits*. The Banking Act of 1935 changed it to *total domestic deposits* and incorporated a deduction for items in the process of collection (float).

Prior to and continuing through the 1980's, large banks attracted and held significant quantities of foreign deposits (deposits in foreign branches of U.S. banks, Edge Act and Agreement Corporations, and International Banking Facilities). It is significant that foreign deposits have never been included in the assessment base, yet, the FDIC implicitly insures them. As of 1990, approximately 12 percent of total deposits in the U.S. banking system were foreign and thus nonassessable.

A shift in the composition of bank liabilities also occurred during the 1980's. An increasing share of bank liabilities was from nondeposit sources such as Federal funds purchased and repurchase agreements sold, items also not in the deposit insurance assessment base. These trends were more pronounced among larger banks, thus increasing the proportion that smaller banks paid to the FDIC insurance fund.

A comparison of average balance sheets for farm banks and large banks shows that almost all of the liabilities of farm banks are assessable domestic deposits (they hold no foreign deposits), while slightly less than half of the liabilities of large banks are assessable for insurance purposes. This in itself would not be an issue if, when any bank failed, only those deposits that were insured were paid off. However, the FDIC policy regarding coverage of uninsured deposits has explicitly been to cover all deposits for large banks that fail but not all deposits for failed small banks. This has been labeled the "too-big-to-fail" policy.

In addition to the inequality on the face of it, this dichotomy of treatment, according to size, for failed banks, has led

small banks to make three charges. First, they point out that any attempt to restrict the amount of insured deposits that a single depositor is entitled to would likely cause an outflow of funds from small banks (where deposit insurance limits are enforced) to large banks (where all deposits are effectively insured against loss).

Second, large banks may be able to pay lower rates on their "fully insured" deposits, thereby achieving an interest rate (and therefore, cost) advantage. Because depositors believe the Federal Government will reimburse them in full in the event of a large bank failure, they aren't likely to require a risk premium on their deposits.

Third, the FDIC is effectively insuring all liabilities of large banks while only assessing their domestic deposits. This increases the relative burden of small banks in paying for deposit insurance as they carry few liabilities outside of domestic deposits.

The FDICIA did not alter the assessment base. Neither foreign deposits nor nondeposit liabilities will be assessed. However, in the event that foreign depositors are paid off in a failure resolution, the FDICIA does require FDIC to make a special retroactive assessment against existing foreign deposits. Because almost all foreign deposits are held in banks likely to be considered "too-big-to-fail," assessing only foreign deposits will be more equitable than an across-the-board assessment on all bank deposits. The fact remains, however, that the "too-big-to-fail" standard was not eliminated by the legislation.

Under the terms of FDICIA, the determination that the potential failure of a large insured bank represents a risk to the entire banking system is made jointly by the President, the Secretary of the Treasury, the Federal Reserve Board, and the FDIC. If this ensues, the FDIC must cover the resulting losses by a special assessment against the total assets, less tangible equity and subordinate debt, of all insured banks. This has the effect of shifting the burden of covering losses toward big banks.

In a related issue, FDICIA places restrictions on the ability of the Federal Reserve to keep troubled banks open

through direct low cost loans. Under the new rules, the bank in question must be certified as viable (likely to survive) by its primary regulator in order for any subsequent losses to be covered by the BIF. If it is not certified as viable, and the Federal Reserve lends and suffers losses in the bank's failure, the funds to cover the loss come from the Treasury Department. Interestingly, at the same time Congress was attempting to limit Federal Reserve exposure to failing banks at the discount window, it made explicit the Fed's power to open the window to troubled nonbank financial firms such as securities brokerages. This would appear to be a significant, explicit expansion of governmental underwriting of risks in private financial markets.

The final section of the new law, which relates to systemic risk in bank failures, involves interbank deposits. This reflects the fear that large banks that fail may have significant deposits from smaller correspondent banks, which could then fail, due to the loss of those deposits. The FDICIA requires bank regulators to develop regulations to limit the potential of this chain-reaction effect.

The Assessment Rate

In addition to the assessment base, the assessment rate for deposit insurance has changed several times over the years. The Banking Act of 1933 set the rate at one-half of 1 percent of *insured deposits*, with authority for special assessments. The Banking Act of 1935 dropped the assessment rate to one-twelfth of 1 percent of *domestic deposits* and canceled the special assessment rights, instead granting emergency borrowing privileges of \$975 million from the Treasury. The borrowing privilege was subsequently increased to \$3 billion in 1947 and to \$5 billion in 1989.

The Federal Deposit Insurance Act of 1950 (FDI Act) established a rebate system for "excess premium assessments." As of 1980, the granting of rebates has been made on the basis of the ratio of the insurance fund balance to insured deposits. The ratio's range was designated by Congress to be from 1.25 to 1.40 percent of insured deposits. In 1989, Congress increased the maximum designated reserve ratio to 1.50 percent

of insured deposits. Since 1990 it has been left to the discretion of the FDIC. The 1991 FDICIA establishes a minimum of 1.25 percent for the BIF balance ratio to insured deposits to be reached within 15 years.

Congress granted the authority to raise the annual assessment rate to 0.15 percent of domestic deposits in 1989. This was subsequently altered to allow semi-annual rate adjustments by the FDIC. The rate stood at 0.083 percent of total domestic deposits on December 31, 1989. On January 1, 1990, it increased to 0.12 percent, on January 1, 1991, it increased to 0.195 percent; and on July 1, 1991, it increased to 0.23 percent of total domestic deposits. This represents a 177-percent increase in the assessment rate over an 18-month period. The ceiling on the assessment rate was eliminated altogether in 1990. Over this period, the outlay for deposit insurance at the average agricultural bank rose from \$29,000 to \$81,000 a year.

A rough approximation of the impact on lending by the average agricultural bank, assuming the fee increase comes directly from retained earnings (which would have supported lending in the proportion that the bank currently has in its portfolio), is a decrease in loans of \$280,000 using December 1989 data.

The most likely scenario is for banks to attempt to pass some of the increase in deposit-insurance costs on to borrowers through higher interest rates or loan fees, or to pass it on to depositors through reduced interest paid on deposits and higher fees assessed on deposit accounts. One estimate of the potential increase in loan rates necessary to recover the increased cost shows that an increase of 27 basis points would be required. Conversely, if depositors were to be assessed, there would be a reduction of interest paid of 14.7 basis points. There is some evidence that indicates that banks are attempting to pass the increased insurance costs on to depositors. This is taking the form of reductions in interest paid and increased account fees that are tailored to the bank's assessment of its likelihood of suffering deposit disintermediation.

The FDICIA did not specifically set a current assessment rate, leaving that to the FDIC. The current chairman of the

FDIC has indicated that further increases in the premium may be possible as early as July 1992. Future rate increases depend upon the amount of funds required for the FDIC to achieve the mandated 1.25-percent ratio of insurance fund balance to insured deposits within 15 years.

Two provisions of FDICIA are targeted toward particular social objectives and will slow any increase in the insurance fund. One reduces the assessment rate for deposits attributable to lifeline accounts (accounts held by low income people, mainly for the purpose of cashing paychecks). The other provides assessment credits for certain qualifying bank activities relating to economically distressed communities (e.g., mortgage lending in poor neighborhoods). However, the potential reduction in premiums for farm banks appears to be slight.

The major criticism of the operation of Federal deposit insurance has been that its flat rate structure (i.e., the amount of the premium is not related to bank risk-taking) has induced banks to take actions that increase the likelihood of bank failure (called "moral hazard"). In an effort to address this problem, the FDICIA directed the FDIC to develop an insurance system based on bank portfolio risk. Farm banks may actually benefit under the new system because they are highly capitalized (relative to other banks), which should result in lower premiums. This will be especially true if equity capital is considered as preferred over other capital items. On the other hand, if portfolio concentration is penalized as riskier, the farm banks may not see their position improved. The system of risk-based premiums is to be implemented January 1, 1994.

Insurable Deposits

Deposit insurance coverage was limited to \$2,500 per account for the first 6 months of its existence, beginning January 1, 1934. It rose to \$5,000 on July 1, 1934, and was increased sequentially to its current limit of \$100,000 per account. Merely looking at the maximum coverage per account can be misleading. Not all deposits are insured or insurable, but the definition of an insurable deposit is quite expansive.

FDIC regulatory language clarifying details of insurability under the FDI Act was not adopted until 1967. Prior to that time, determinations of insurability were based on informal FDIC staff interpretations. An extensive internal revision of the 1967 FDIC regulations was put into place May 15, 1990.

The current definition allows multiple accounts to be covered within one bank, and insured accounts in multiple banks. Thus enterprising depositors should be able to insure all their deposits. For example, the potential coverage for a family of four in a single bank exceeds \$1.4 million. Efforts to limit the amount insurable by a single individual failed on the argument that the continuation of the "too-big-to-fail" policy, in combination with limits on insurance, would drive small banks out of business.

Two types of insured deposits that deserve specific mention are pass-through insurance and brokered deposits. Pass-through insurance refers to the insurance of deposits that are placed in the depository institution by an entity that is not the owner or beneficiary of the deposit. For example, a professionally managed retirement fund.

A subset of funds receiving pass-through insurance is bank insurance contracts (BIC's). In these contracts, the banks agree to pay a depositor a guaranteed rate of interest for depositing the funds at a particular time and for a specific duration of time. BIC's may allow the beneficiary to withdraw the funds under some conditions. This could subject the bank to interest-rate risk, i.e., a depositor may withdraw funds when rates exceed the contractual guarantee, but may leave the funds in place if the contractual rate exceeds market rates. The new law restricts the insured amount on a BIC to a total of \$100,000 whether or not the BIC is owned by one or multiple beneficiaries.

Another type of insured deposit that has attracted some attention is the brokered deposit. In this case, a third party pools deposits, divides them into units of \$100,000 or less, and deposits them in banks where they are fully insured. Concern regarding the insuring of these deposits arose when it was observed that some failed institutions had large quantities of these funds among their deposit

liabilities. Further, these deposits appeared to be highly interest sensitive, so that riskier banks could attract them by paying higher interest rates. The new law restricts the purchase of brokered deposits to very highly capitalized banks and limits the maximum interest rates banks can pay to acquire these deposits.

Other "Safety and Soundness" Provisions

The FDICIA requires that each insured bank be examined once a year by its regulator. There are two adjustments to this requirement. A State regulator examination may be substituted every other year if the Federal regulator approves. And, for banks having under \$100 million in assets, the frequency of examinations can drop to every 18 months if that bank's examination places it in the highest quality classification. Additionally, the law requires banks with over \$150 million in assets to have an annual audit by an independent accounting firm. This restriction will exempt many farm banks from the law's independent audit provision and allow them to take advantage of their high capital situation to reduce the frequency of their examinations.

Results of the examinations and audits will contribute to the placement of each insured bank within one of the five expanded capital classifications spelled out in FDICIA. These classifications will be used by regulators, along with their new early intervention powers, to act in a more forceful and timely manner with problem banks. The intent of the early intervention powers is to close banks before all capital is either exhausted or significantly negative.

A provision to limit the compensation of bank executive officers, employees, outside directors, and principal shareholders was also included in FDICIA. The justification for the provision was that "excess" compensation may have led to losses that eventually resulted in bank failure and subsequent outlays by the BIF. Small banks, including farm banks, have objected strenuously to this provision as undue government regulation of private contracts. They also argue that this restricts their ability to attract quality outside directors just when regulators are pressuring them to in-

crease director responsibility. This provision is sure to affect many farm banks.

Miscellaneous Provisions Affecting Farm Banks

The FDICIA contains four provisions designed to increase available information on bank operations. The first is a requirement for more reporting of data on bank loans to small businesses and farms. These data are to include the number and volume of such loans, as well as chargeoffs, and interest and fee income. This is a reaction to the "credit crunch," much discussed during debates leading up to the legislation. It will allow regulators to monitor the nature of credit flows to specific borrowing groups. Depending upon how the implementing regulations are written, this provision will represent either a moderate or large increase in the reporting burden for farm banks.

Additionally, FDICIA requires regulators to develop stricter reporting procedures for banks' "off-balance-sheet" activities, such as loan commitments and contingent liabilities. Further, regulators are to consider increasing the required reporting of the market values of bank assets and liabilities (called "marking-to-market"). The latter provision has very significant implications for farm banks. If the application of "marking-to-market" is very strict, there will be great difficulty in determining many asset values. For example, no market exists for the sale of a small farm loan by the only commercial bank in a small rural community. Similarly, there is not likely to be a market for municipal securities of many smaller communities, and banks are major purchasers of these instruments.

Finally, an FDICIA provision requires banks to disclose a wider variety of information regarding terms and conditions of deposit accounts. This "Truth in Saving" provision will make more information available to depositors regarding the terms of their bank deposits, but it will also increase the banks' paperwork burden.

Bank Reform Left Undone

Congress abandoned the bank reform components in the final legislation. The provisions dropped included interstate

banking and branching, broadening of bank investment powers, and purchase of banks by nonbank firms. The Treasury's legislative proposal called for the removal of all geographic restrictions on banks. This would have eliminated the current patchwork of State legislation and broadened opportunities for loan portfolio diversification. Small rural and farm banks were adamantly opposed to this provision, fearing increased out-of-State competition, particularly in light of the "too-big-to-fail" policy.

The broadening of bank investment powers to include the underwriting of insurance and securities, as well as direct investment in equities, was also rejected. This was opposed by insurance companies and securities dealers who didn't want the competition. It was also opposed by those who saw it as a shift away from the current form of corporate control, which is based on the stock market, and toward the Japanese and German model of close coordination of financial and corporate interests. This was also Congress' concern and was the basis for its decision to not allow nonfinancial corporations to purchase banks.

A provision to limit banks' environmental liability was also dropped in conference committee. Several banks have been held liable for environmental damage on properties they have received as collateral in foreclosure on defaulted loans. This has chilled lending to some industries and firms that use hazardous chemicals, including some in agriculture.

Net Outcome for Farm Banks

The FDICIA represents a break-even proposition for agricultural banks. It could result in improvement of their financial position, depending on the final structure of the risk-based deposit insurance premiums. If the premiums are favorable to banks with high equity capital levels, with less concern about a bank's loans being concentrated in a particular sector, then farm banks will benefit. If regulators are more concerned with the effects of concentrated lending in a particular sector, farm banks may suffer. This issue will not be finalized until January 1, 1994.

The FDICIA altered the “too-big-to-fail” policy of bank regulators, thereby reducing the inequitable cost burden of small and agricultural banks. Big banks now have to carry more of the load for big bank bailouts and foreign deposit payoffs. This is to be accomplished through special assessments on big bank holdings of nondeposit and foreign deposit liabilities. Nonetheless, all banks will face continued high insurance premiums as they repay the BIF recapitalization loans. These are funds not available for lending. FDICIA’s early intervention and toughened capitalization provisions should help reduce bank failures in the long run, eventually leading to lower premiums for the BIF.

The ability of nonbank financial firms to successfully prevent banks from receiving authority to enter other financial product markets has put banks in general at a disadvantage. The amount of government regulation of finance companies, mutual and money market funds, and other financial market participants is generally less than it is for banks. Over time this will allow nonbank financial firms to capture customers from the highly regulated—and thus higher cost—banking sector. This is already evident in the emergence and growth of the commercial paper market for corporate debt where commercial banks, once the dominant providers of corporate credit, hold only a minority

share of the market. Further, recent drops in deposit interest rates appear to have brought a significant shift of funds into mutual funds.

The major increase in regulation imposed by FDICIA represents the greatest impediment for farm, and other predominantly small, banks. The ability of farm banks to control their operating costs has been one key to their sustained profitability and competitiveness. Increased reporting, auditing, and examination, and consumer information requirements will increase operating costs for these banks.

Changes in Farm Credit System Structure

by

Robert N. Collender¹

Abstract: This article reviews the structural changes within the Farm Credit System (FCS) that were precipitated by farm-sector financial distress and macroeconomic policy changes over the past decade. Among these changes was a restructuring of FCS banks and associations, the establishment of institutions to assist or liquidate distressed System components, and the reorganization of the Farm Credit Administration as an arm's length regulator. The challenge to the FCS and Congress was to insulate financial performance from forces beyond the System's control. To a large extent, this challenge has been met by transforming the FCS institutional structure and adopting more sophisticated management practices.

Keywords: Farm Credit System, reorganization, assistance.

A combination of forces converged during the 1980's to precipitate the most far-reaching reorganization of Farm Credit System (FCS) institutions since their founding. These forces were unleashed by a deep agricultural recession, macroeconomic policy shifts, and unsound FCS operating practices. These factors combined to create a farm debt crisis during which the FCS sustained some of the largest losses among institutions lending to agriculture, while FCS loans to farmers shrank from a peak of \$64 billion on December 31, 1982, to \$39 billion by the end of 1989.

This article reviews the structural changes precipitated by the financial distress of the past decade. Among the changes was a restructuring of FCS banks and associations, the establishment of institutions to assist or liquidate distressed System components, and the reorganization of the Farm Credit Administration as an arm's length regulator. The extent of these changes is illustrated in figure B-1, which shows FCS organization charts for 1980 and 1991. This restructuring was designed to facilitate the movement of capital among System institutions and to eliminate some inefficiencies that had evolved with the FCS.

Operating Changes Needed To Limit Risk

The agricultural recession was characterized by declining farm income, falling asset values, and widespread financial distress among farm borrowers. Macroeconomic policy shifts included a change in philosophy at the Federal Reserve Board toward an emphasis on controlling inflation and a shift in Federal fiscal policy toward "supply side" economics, as embodied in the 1981 tax cuts. These factors were both overwhelming and beyond FCS control.

Of greater interest is the extent to which the FCS, through sound business practices, can control the potential impact of changes in its operating environment on its own viability and fiscal health. From this perspective, FCS performance fell short of its potential during the 1980's. In hindsight, this underperformance was linked both to discretionary policies adopted by System institutions and to inefficiencies inherent in the institutional design of the System. Several examples of flaws in both FCS operating policy and institutional design can be cited.

System History Led to Inherent Inefficiency

Examples of flawed operating policies include reliance on collateral value rather than repayment ability in underwriting decisions, average-cost pricing of loans regardless of date originated or risk, and lack of asset/liability manage-

ment to minimize interest rate risk exposure. When the agricultural sector suffered severe financial stress, these policies led to high default rates, loss of market share, borrower flight, low operating income, and capital losses.

Heavy reliance on collateral in loan underwriting made FCS institutions particularly vulnerable when agricultural asset values started to erode. Average-cost pricing, coupled with a lack of interest rate risk management, made the FCS vulnerable to the sharp shifts in both the level of interest rates and their term structure.

The FCS had been following a funding strategy that, in a period of rising interest rates, allowed it to underprice its competition. Borrowers were charged the average interest cost, plus a markup for operating expenses.

Interest rates had been rising since the mid-1960's, and the portfolio of FCS securities included long-term, older securities with low interest rates. This meant the average price the System paid on its debt securities, less than the marginal cost of funds, the major factor determining interest rates among the System's commercial competitors.

This strategy worked as long as interest rates were rising. When interest rate volatility increased in the late 1970's, it became very dangerous. By the mid-1980's, interest rates had started falling, but the FCS had issued a large amount of high cost, long-term bonds at the start

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Figure B-1a--Farm Credit System Organization, January 1, 1980

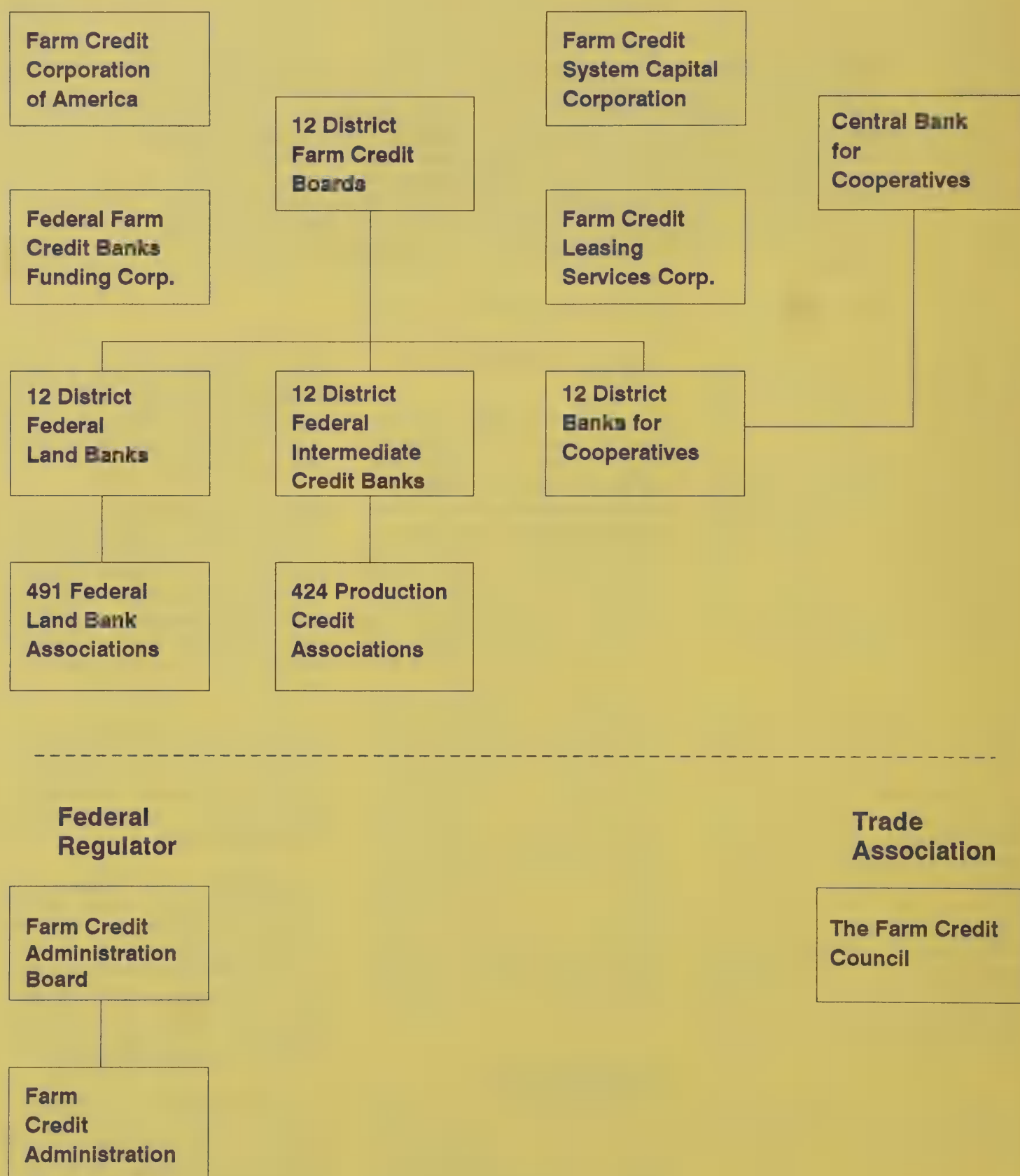
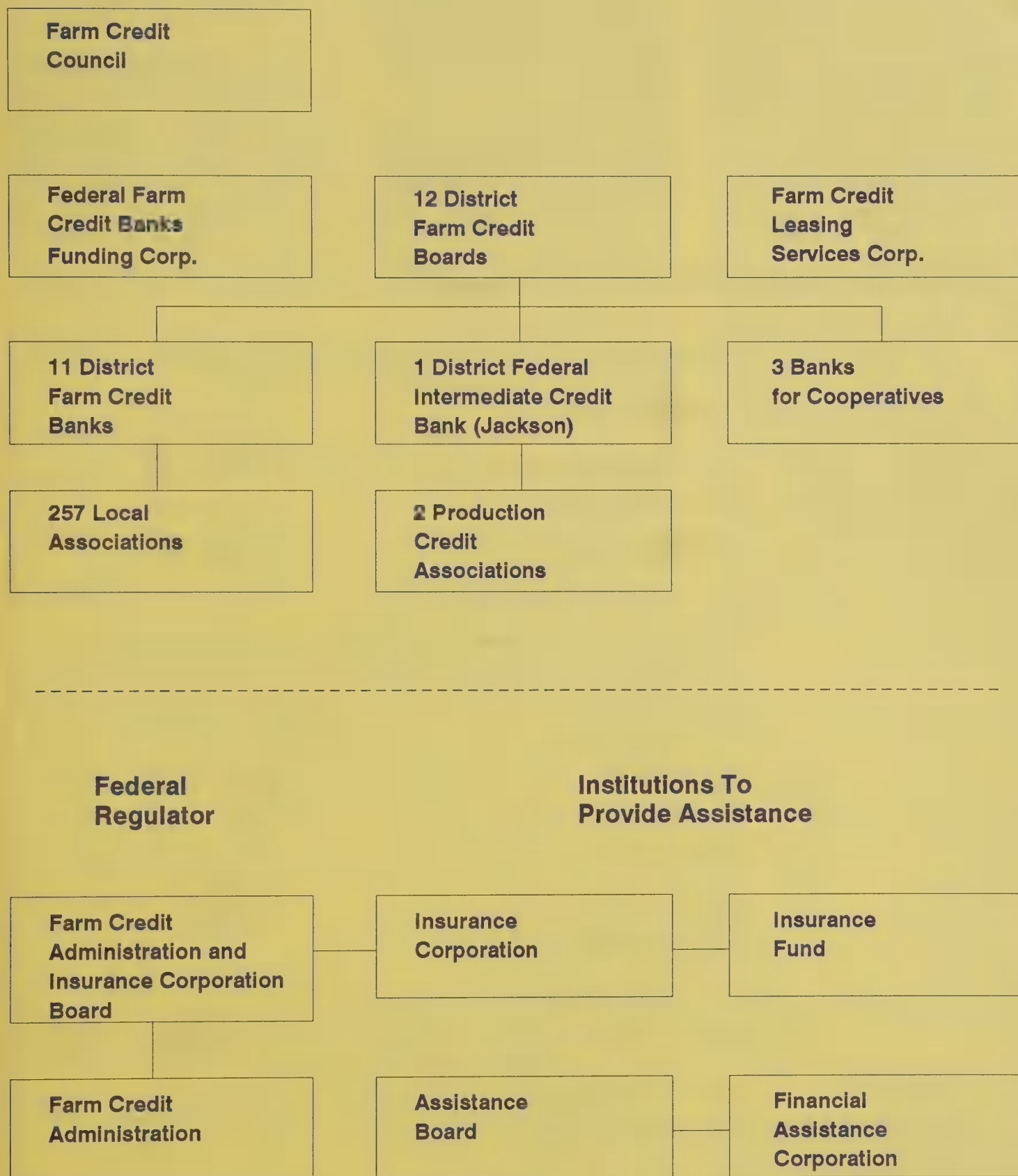


Figure B-1b--Farm Credit System Organization, January 1, 1992



of the decade. In a falling interest rate environment, average-cost pricing of loans overprices the market. Many borrowers who could qualify for loans elsewhere left the System. The General Accounting Office estimates that the FCS paid \$3.4 billion in excess interest expenses in 1985 and 1986. Thus, poor asset/liability management may have cost the System almost as much as direct chargeoffs (4).

Flaws in the System's institutional design included its organization into units on the basis of both geography and function. Piecemeal creation of System in-

stitutions from 1917 through the 1930's led to the creation of three sets of banks and two sets of associations to service the agricultural sector. Some districts had recognized the inherent inefficiency of this arrangement and put both district banks and local associations under joint managements, but other districts continued to operate each bank and association independently.

These inefficiencies have two basic sources. First, many associations were unable to attain the size necessary to achieve economies of scale. Evidence from the literature on commercial banks

indicates scale economies exist at least through \$100 million in asset size (1). Even FCS associations with portfolios of \$100 to \$200 million exhibit considerable economies of scale (2).

The second source of inefficiency has been the inability of many associations and districts to diversify risks geographically or across commodities. Most agricultural areas are dominated by the production of a limited number of commodities. The historical development of the FCS precluded associations and banks from diversifying across loan types, e.g., for cooperatives,

FCS and Related Institutions

Assistance Board: The Farm Credit System Assistance Board.

Associations: Cooperative lending associations including ACA's, FLCA's, FLBA's, and PCA's

ACA: Agricultural Credit Association

Banks: All Farm Credit System Banks including FCB's, FICB's, FLB's, and BC's

BC: Bank for Cooperatives including Central Bank for Cooperatives and, after 1988, Cobank.

CoBank: The National Bank for Cooperatives, established in 1989 following the merger of 10 of the 12 district Banks for Cooperatives with the Central Bank for Cooperatives.

FCA: The Farm Credit Administration, the independent Federal agency that regulates the Farm Credit System.

FCB: Farm Credit Bank—district bank created from the merger of the FLB and FICB in each district except Jackson.

FICB: Federal Intermediate Credit Bank

FLB: Federal Land Bank

FLBA: Federal Land Bank Association

FLCA: Federal Land Credit Association

FAC: Farm Credit Financial Assistance Corporation

Funding Corporation: Federal Farm Credit Banks Funding Corporation

Insurance Corporation: Farm Credit System Insurance Corporation

Insurance Fund: Farm Credit Insurance Fund maintained by the Insurance Corporation

for real estate purposes, and for nonreal estate purposes. A traditional emphasis within the System on local control of the cooperative associations limited their size and, thus, their diversification potential.

Banks Consolidate

Until the FCS was reorganized under the Agricultural Credit Act of 1987, P.L. 100-233, it included 37 constituent banks. Each of the 12 Farm Credit Districts was served by a Federal Intermediate Credit Bank, a Federal Land Bank, and a Bank for Cooperatives. In addition, there was a Central Bank for Cooperatives in Denver, Colorado. Each type of bank was chartered to provide loans for specific agricultural purposes. Federal Land Banks (FLB's), through their related Federal Land Bank Associations (FLBA's), made farm real estate loans. Federal Intermediate Credit Banks (FICB's) and Production Credit Associations (PCA's) made production loans and intermediate-term loans. Banks for Cooperatives (BC's) provided credit to agricultural cooperatives. The Agricultural Credit Act of 1987 legislated a number of changes in this structure.

The Act mandated that within 6 months of its enactment the FLB and FICB in each district would merge horizontally to form a district Farm Credit Bank (FCB). These mergers were successfully completed in 11 of the 12 districts. No merger occurred in the Jackson district because the FLB was placed in receivership and liquidated, leaving the FICB without a merger partner. The Farm Credit Administration (FCA) transferred long-term lending authority for the Jackson district to the Texas FCB and moved to force the merger of the Jackson FICB into the Texas FCB. The Jackson FICB sued to block the forced merger and petitioned to create a new Jackson FLB as a merger partner. Courts subsequently ruled that the FCA lacked authority to force the Jackson FICB to merge with the Texas FCB. However, in the wake of the 1987 Act, the FCA claims it no longer has the authority to charter FLB's.

Ten of the 12 district BC's voted to consolidate with the Central BC to form CoBank. This consolidation became effective on January 1, 1989. The BC's in

the Springfield and St. Paul districts declined to join this consolidation. However, because more than eight of the district BC's voted to consolidate, all three remaining banks are allowed to compete without territorial restrictions, as specified in the Act.

The Act also established a procedure for consolidation of the 12 existing Farm Credit Districts into no fewer than 6 districts. A special committee, consisting of one member of each FCB board and the members of the Board of Directors of the FCS Assistance Board, was charged with developing a consolidation proposal. Following FCA approval and other prerequisites, a proposal was to be submitted to stockholders not later than 18 months after the Act's enactment (July 6, 1989). However, after completing its work in April 1989, the special committee concluded that it would not propose any mergers.

The first voluntary interdistrict merger between the FCB's of St. Louis and St. Paul was announced last September. This merger is set for consummation on May 1, 1992, pending approval from stockholders in the affected districts, the FCA, and the FCS Assistance Board (as St. Paul is operating under supervision of the Board subsequent to accepting financial assistance in 1988). Several factors have been cited in fueling this merger, including:

- similarity of operating philosophies;
- similarity in association structure (mostly unmerged, traditional PCA/FLBA);
- expectations of duplicating cost savings achieved by BC mergers in asset/liability management; and
- wider diversification of agricultural production (small grains and dairy in St. Paul; corn, oilseeds, and livestock in St. Louis).

Although exploratory talks have been held among other FCB's, no other districts appear to be close to merger.

Many Associations Merge and Reorganize

The 1987 Act encouraged associations to merge voluntarily. These mergers could be with like or complementary associations within the same general geographical area. Thus, existing PCA's and FLBA's were encouraged to merge to form larger associations. PCA's and FLBA's could also merge to form new associations with both real estate and nonreal estate authority. These new associations were to be known as Agricultural Credit Associations (ACA's). The Act also authorized the formation of Federal Land Credit Associations (FLCA's) through the transfer of lending authority from FCB's to pre-existing FLBA's.

Except for the FLBA's, each type of association is chartered as a direct lender, generally holding loans they originate in their own portfolio. FLBA's originate loans for the portfolios of the regional banks, having no loan portfolio of their own. Each type of association also has a different mandate in terms of the types of loans (real estate or nonreal estate) it can originate. PCA's have nonreal estate lending authority; FLBA's and FLCA's have real estate lending authority; and ACA's have authority to originate both types of loans.

Even before the consolidations mandated by the 1987 Act, many mergers and consolidations were taking place among FLBA's and PCA's within districts. In 1980, there were 491 FLBA's and 424 PCA's totaling 915 associations. By the end of 1987, after 2 years of unprecedented financial pressure, these numbers had been reduced to 231 FLBA's and 159 PCA's. Within 2 years after passage of the Act, the numbers of FLBA's and PCA's fell to 147 and 95, respectively, at the end of 1989. In addition, 39 ACA's had been created from horizontal mergers of PCA's with FLBA's.

Two FLCA's were created by transferring lending authority and downloading existing long-term loans from the Louisville FCB to two of its FLBA's. By the beginning of 1992, the total number of associations had fallen to 250, of which 93 (or 37 percent) were ACA's and FLCA's. Overall changes in the

number and composition of associations, over time, are presented in figure B-2. Figure B-3 shows the current configuration of FCS associations by district.

Entities Created To Assist System Institutions

To reduce the transaction costs and uncertainties of aiding distressed FCS institutions, three new agencies were created by the 1987 Act: the Farm Credit Assistance Board, the FCS Financial Assistance Corporation (FAC), and the FCS Insurance Corporation.

Farm Credit Assistance Board

The 1987 Act established the Farm Credit System Assistance Board to assist System institutions in regaining economic viability and to protect outstanding borrower stock. This authority expires at the end of 1992. Legislators emphasized that the purpose of aiding the FCS was to better the lot of farmers by continuing to provide credit at reasonable and competitive rates and not to save the System itself.

The Assistance Board is controlled by a three-member Board of Directors, including the Secretaries of Agriculture and the Treasury and one agricultural producer appointed by the president and confirmed by the Senate.

The primary mechanism for providing assistance to the System is through Assistance Board certification of each distressed institution's eligibility to receive aid and authorization of specific assistance through the FCS Financial Assistance Corporation. This process of certification entails several steps.

A distressed institution must request certification. An institution is eligible if the book value of its stock and similar equities is less than par, or stated value. If the value of these securities is less than 75 percent of par, the institution must request certification. Otherwise, the request is at the discretion of the institution's officers. The Assistance Board has sole discretion in responding to a request for certification and may decline to provide assistance, as was the case with the Jackson FLB.

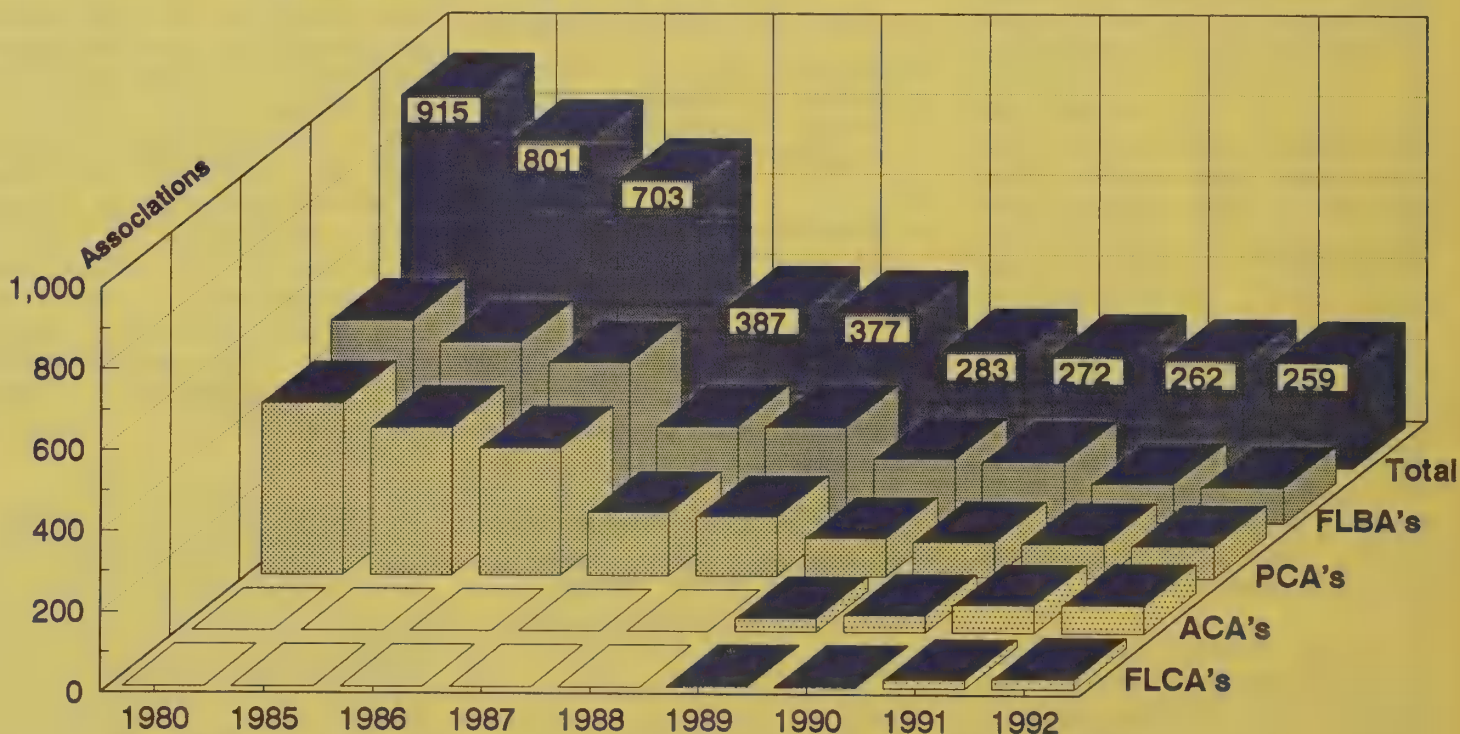
Once an institution has requested certification, the Assistance Board can im-

pose any actions necessary to establish prudent operating practices and a return to sound financial conditions. These actions may include prior approval of business plans, operating policies, debt issuances, certain personnel matters, or requiring a merger with another FCS entity. If the Assistance Board determines that financial assistance is inappropriate, it can request the appointment of a receiver or conservator by the Farm Credit Administration and direct the Financial Assistance Corporation to provide the receiver with sufficient funds to retire equities at par. (After January 1, 1993, the FCS Insurance Corporation is to provide such funds.)

Once a distressed institution is certified and agrees to the conditions, the Assistance Board can provide the following forms of financial aid:

- authority to issue preferred stock to FAC in amounts necessary to maintain the book value of equities at a specified level;
- authority to issue preferred stock to FAC in an amount equal to the premium to retire high-cost debt at the then current market value; and

Figure B-2--Changes in the Number and Composition of FCS Associations, 1980-92



Source: FCA Bulletin and FCA Annual Report, various issues.

- at the request of the institution, authority to issue preferred stock to FAC to facilitate a merger with another System entity (3).

Such assistance may be suspended or terminated if the Assistance Board determines an assisted institution has violated the conditions of assistance.

FCS Financial Assistance Corporation

The FAC must fund assistance to the System through the issuance of up to \$4 billion in debt securities. These securities must be approved by the Assistance Board and are guaranteed by the Secretary of the Treasury and backed by the U.S. Government. They mature 15 years from the date of issuance and may not be issued after September 30, 1992. To date, \$1.261 billion of FAC securities have been issued.

The authorized uses of the proceeds from FAC debt issues include:

- purchase of preferred stock authorized by the Assistance Board;
- payments to receivers of institutions in liquidation;
- obligations related to the pre-existing Capital Preservation Agreement among System institutions; and
- Assistance Board expenses (3).

FCS Insurance Corporation

To provide a permanent mechanism to assist distressed FCS institutions, protect holders of FCS securities, and shield taxpayers from future calls for assistance, the 1987 Act established the FCS insurance fund. By requiring that the resources of the fund be exhausted before joint and several liability of the FCB's can be invoked, the fund also acts as a buffer among banks. This is important because resistance to capital sharing arrangements at both the association and bank levels generated costly and time-consuming litigation during the 1980's.

The fund is controlled by the FCS Insurance Corporation and managed by a board of directors consisting of the FCA

Board, which may authorize use of its assets as follows:

- making payments to the FAC in the event of default by certified System institutions on their obligations, related to the issuance of bonds by the FAC;
- making payments of principal and interest to the holders of FCS bonds in the event of a default by the bank having primary liability on such obligations;
- providing funds to an institution that is otherwise unable to retire protected borrower stock at par value and protected participation certificates or other similar equities at stated value;
- providing financial assistance in certain circumstances to System institutions, as is deemed appropriate in the sole discretion of the Insurance Corporation; and
- paying the operating expenses of the Insurance Corporation, the only authorized use prior to January 1993 (3).

Because of the various potential uses of the fund, there is no assurance that assets will be available at any given time for any particular use, including the insurance of principal or interest on System obligations.

The fund has two primary sources of its assets. The first is its initial funding of \$260 million, transferred from a revolving fund previously administered by the FCA. The second is premiums assessed on FCB's, on the basis of loans made by the banks and their related direct-lending associations to borrowers. FCB's may, in turn, assess their direct-lending associations.

The annual premium is based on average accrual loans outstanding, average nonaccrual loans outstanding, and average accrual loans outstanding in Federal and State Government guaranteed programs. Premiums range from 25 basis points for nonaccrual loans to 1.5 basis points for accrual loans or loans with Federal Government guarantees in accrual status. Premiums for loans with

State government guarantees in accrual status are 3 basis points. These premiums are to accrue until the fund reaches 2 percent of aggregate outstanding insured obligations, or until the FCS Insurance Corporation determines the fund to be actuarially sound.

The Farm Credit Administration

In the course of the 1980's, the Farm Credit Administration (FCA) was transformed from a functional component of the FCS into an arm's length regulator, with powers to ensure the safety and soundness of the System. The FCA is now an independent Federal regulatory agency governed by a three-member board. Board members are appointed by the president and serve 6-year, staggered terms. Not more than two members may be from the same political party.

The 1987 Act authorizes the FCA to issue regulations governing FCS operations and requires the FCA to examine each System bank and direct-lending association at least once a year. FLBA's must be examined at least once every 3 years. These examinations follow the CAMEL format applied by other financial regulators (*capital adequacy, asset quality, management and administration, earnings, and liquidity*).

The FCA has the authority to issue cease-and-desist orders, suspend or remove directors or officers of System institutions, and impose civil fines to ensure sound operations and compliance with Farm Credit laws and regulations. In addition, the FCA must approve the amount, maturities, interest rates, and terms and conditions of FCS banks participating in each issue of systemwide debt securities. Any of these enforcement powers may be exercised to obtain compliance with the terms and conditions governing use of financial assistance from the Assistance Board.

Concluding Comments

Much of the stress that FCS institutions experienced during the agricultural debt crisis of the 1980's originated beyond the control of the System. However, many observers feel that a large portion of the negative impact of the crisis could have been mitigated by more sophisticated management practices. To a large

extent, the FCS has risen to the challenge of insulating its financial performance from forces beyond its control. The restructuring documented in this article is one aspect of this process. This restructuring has created an arm's length regulator, new institutions for resolving issues of financial distress within the FCS, and larger, less risky banks and associations.

In general, the developments in FCS structure over the last decade must be evaluated as positive from the perspective of economic efficiency. The creation of FCB's eliminates duplication of functions among formerly separate banks and allows for internalization of diversification potential across nonreal estate and real estate loan portfolios.

The BC's have apparently succeeded in reducing their operating costs per dollar loaned since their merger. The potential of FCB's duplicating this feat remains to be realized.

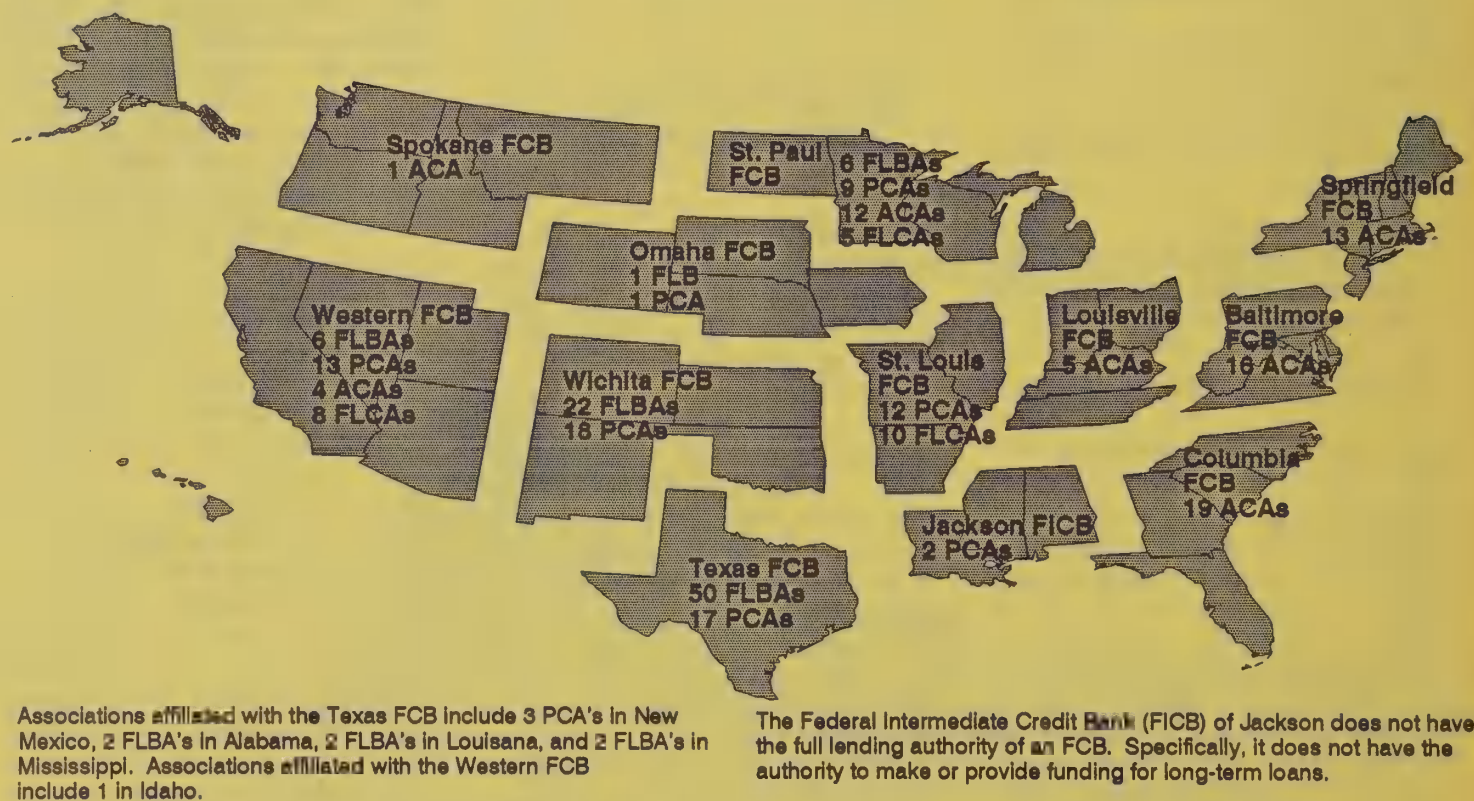
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Figure B-3--Farm Credit Banks and Affiliated Associations, January 1, 1992



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Appendix table 1--Total farm debt, excluding households, December 31, 1975-91

	Debt owed to reporting institutions					Individuals and others 1/	Total debt
	Farm Credit System	Commercial banks	Farmers Home Adm.	Life insurance companies	Total		
Million dollars							
1975	25,223	24,672	4,604	6,198	60,697	24,316	85,013
1976	29,007	28,077	4,963	6,828	68,874	27,191	96,065
1977	32,992	31,289	6,378	8,150	78,808	32,047	110,855
1978	37,564	34,435	8,833	9,698	90,529	36,871	127,400
1979	45,376	37,125	14,442	11,278	108,222	43,329	151,551
1980	52,974	37,751	17,464	11,998	120,187	46,636	166,823
1981	64,565	38,798	20,802	12,150	136,315	49,065	185,380
1982	64,219	41,890	21,274	11,829	139,213	49,592	188,805
1983	63,708	45,422	21,428	11,666	142,224	48,840	191,065
1984	64,686	47,245	23,262	11,889	147,082	46,699	193,781
1985	56,167	44,469	24,534	11,270	136,440	41,150	177,590
1986	45,905	41,620	24,137	10,374	122,037	34,923	156,960
1987	40,026	41,130	23,552	9,352	114,060	30,339	144,399
1988	37,134	42,705	21,851	9,016	110,705	28,651	139,356
1989	36,147	44,788	18,969	9,038	108,942	28,191	137,133
1990	34,843	47,359	16,918	9,599	108,719	27,739	136,458
1991P	34,334	49,300	17,183	9,989	110,806	28,446	139,255
Percent change in year							
1975	16.2	9.4	20.6	6.9	12.7	10.6	12.1
1976	15.0	13.8	7.8	10.2	13.5	11.8	13.0
1977	13.7	11.4	28.5	19.4	14.4	17.9	15.4
1978	13.9	10.1	38.5	19.0	14.9	15.1	14.9
1979	20.8	7.8	63.5	16.3	19.5	17.5	19.0
1980	16.7	1.7	20.9	6.4	11.1	7.6	10.1
1981	21.9	2.8	19.1	1.3	13.4	5.2	11.1
1982	-0.5	8.0	2.3	-2.6	2.1	1.1	1.8
1983	-0.8	8.4	0.7	-1.4	2.2	-1.5	1.2
1984	1.5	4.0	8.6	1.9	3.4	-4.4	1.4
1985	-13.2	-5.9	5.5	-5.2	-7.2	-11.9	-8.4
1986	-18.3	-6.4	-1.6	-8.0	-10.6	-15.1	-11.6
1987	-12.8	-1.2	-2.4	-9.9	-6.5	-13.1	-8.0
1988	-7.2	3.8	-7.2	-3.6	-2.9	-5.6	-3.5
1989	-2.7	4.9	-13.2	0.2	-1.6	-1.6	-1.6
1990	-3.6	5.7	-10.8	6.2	-0.2	-1.6	-0.5
1991P	-1.5	4.1	1.6	4.1	1.9	2.6	2.1
Percentage distribution of debt							
1975	29.7	29.0	5.4	7.3	71.4	28.6	100.0
1976	31.2	30.2	5.2	7.3	71.7	29.2	100.0
1977	29.8	28.2	5.8	7.4	71.1	28.9	100.0
1978	29.5	27.0	6.9	7.6	71.1	28.9	100.0
1979	29.9	24.5	9.5	7.4	71.4	28.6	100.0
1980	31.8	22.6	10.5	7.2	72.0	28.0	100.0
1981	34.8	20.9	11.2	6.6	73.5	26.5	100.0
1982	34.0	22.2	11.3	6.3	73.7	26.3	100.0
1983	33.3	23.8	11.2	6.1	74.4	25.6	100.0
1984	33.4	24.4	12.0	6.1	75.9	24.1	100.0
1985	31.6	25.0	13.8	6.3	76.8	23.2	100.0
1986	29.2	26.5	15.4	6.6	77.8	22.2	100.0
1987	27.7	28.5	16.3	6.5	79.0	21.0	100.0
1988	26.6	30.6	15.7	6.5	79.4	20.6	100.0
1989	26.4	32.7	13.8	6.6	79.4	20.6	100.0
1990	25.5	34.7	12.4	7.0	79.7	20.3	100.0
1991P	24.7	35.4	12.3	7.2	79.6	20.4	100.0

P = Preliminary. 1/ Includes individuals and others (land for contract, merchants and dealers credit, etc.) and CCC storage and drying facilities loans.

Appendix table 2--Real estate farm debt, excluding households, December 31, 1975-91

	Debt owed to reporting institutions					Individuals and others	storage and drying facilities	CCC
	Farm Credit System	Farmers Home Adm.	Life insurance companies	Commercial banks	Total			Total real estate
Million dollars								
1975	14,533	3,044	6,198	5,621	29,396	15,764	170	45,331
1976	16,881	3,311	6,828	6,075	33,094	17,258	144	50,496
1977	19,640	3,613	8,150	6,994	38,397	19,556	492	58,445
1978	22,686	3,746	9,698	7,717	43,847	21,712	1,148	66,707
1979	27,322	6,254	11,278	7,798	52,653	25,660	1,391	79,704
1980	33,225	7,435	11,998	7,765	60,423	27,813	1,456	89,692
1981	40,298	8,096	12,150	7,584	68,128	29,318	1,342	98,788
1982	43,661	8,298	11,829	7,568	71,356	29,326	1,127	101,809
1983	44,316	8,572	11,666	8,347	72,902	29,386	888	103,176
1984	46,594	9,522	11,889	9,626	77,632	28,436	623	106,691
1985	42,166	9,820	11,270	10,732	73,988	25,773	307	100,068
1986	35,589	9,712	10,374	11,942	67,617	22,657	123	90,397
1987	30,642	9,429	9,352	13,541	62,964	19,377	46	82,387
1988	28,368	8,951	9,016	14,397	60,731	16,870	21	77,622
1989	26,657	8,126	9,038	15,544	59,366	15,929	12	75,307
1990	25,144	7,544	9,599	16,092	58,378	14,992	7	73,377
1991P	24,503	7,644	9,989	17,001	59,137	15,461	4	74,601
Percent change in year								
1975	19.3	5.0	6.9	5.8	12.2	9.8	-21.7	11.2
1976	16.2	8.8	10.2	8.1	12.6	9.5	-15.3	11.4
1977	16.3	9.1	19.4	15.1	16.0	13.3	241.7	15.7
1978	15.5	3.7	19.0	10.3	14.2	11.0	133.3	14.1
1979	20.4	67.0	16.3	1.0	20.1	18.2	21.2	19.5
1980	21.6	18.9	6.4	-0.4	14.8	8.4	4.7	12.5
1981	21.3	8.9	1.3	-2.3	12.8	5.4	-7.8	10.1
1982	8.3	2.5	-2.6	-0.2	4.7	0.0	-16.0	3.1
1983	1.5	3.3	-1.4	10.3	2.2	0.2	-21.2	1.3
1984	5.1	11.1	1.9	15.3	6.5	-3.2	-29.8	3.4
1985	-9.5	3.1	-5.2	11.5	-4.7	-9.4	-50.7	-6.2
1986	-15.6	-1.1	-8.0	11.3	-8.6	-12.1	-59.9	-9.7
1987	-13.9	-2.9	-9.9	13.4	-6.9	-14.5	-62.6	-8.9
1988	-7.4	-5.1	-3.6	6.3	-3.5	-12.9	-54.3	-5.8
1989	-6.0	-9.2	0.2	8.0	-2.3	-5.6	-42.9	-3.0
1990	-5.7	-7.2	6.2	3.5	-1.7	-5.9	-41.7	-2.6
1991P	-2.6	1.3	4.1	5.7	1.3	3.1	-42.9	1.8
Percentage distribution of debt								
1975	32.1	6.7	13.7	12.4	64.8	34.8	0.4	100.0
1976	33.4	6.6	13.5	12.0	65.5	34.2	0.3	100.0
1977	33.6	6.2	13.9	12.0	65.7	33.5	0.8	100.0
1978	34.0	5.6	14.5	11.6	65.7	32.5	1.7	100.0
1979	34.3	7.8	14.2	9.8	66.1	32.2	1.7	100.0
1980	37.0	8.3	13.4	8.7	67.4	31.0	1.6	100.0
1981	40.8	8.2	12.3	7.7	69.0	29.7	1.4	100.0
1982	42.9	8.2	11.6	7.4	70.1	28.8	1.1	100.0
1983	43.0	8.3	11.3	8.1	70.7	28.5	0.9	100.0
1984	43.7	8.9	11.1	9.0	72.8	26.7	0.6	100.0
1985	42.1	9.8	11.3	10.7	73.9	25.8	0.3	100.0
1986	39.4	10.7	11.5	13.2	74.8	25.1	0.1	100.0
1987	37.2	11.4	11.4	16.4	76.4	23.5	0.1	100.0
1988	36.5	11.5	11.6	18.5	78.2	21.7	0.0	100.0
1989	35.4	10.8	12.0	20.6	78.8	21.2	0.0	100.0
1990	34.3	10.3	13.1	21.9	79.6	20.4	0.0	100.0
1991P	32.9	10.3	13.3	22.8	79.3	21.0	0.0	100.0

P = Preliminary

Appendix table 3--Nonreal estate farm debt, excluding households, December 31, 1975-91

	Debt owed to reporting institutions				Individuals and others	Total nonreal estate	CCC crop loans
	Commercial banks	Farm Credit System	Farmers Home Adm.	Total			
Million dollars							
1975	19,051	10,689	1,560	31,300	8,382	39,682	232
1976	22,002	12,127	1,652	35,781	9,789	45,570	936
1977	24,295	13,352	2,764	40,411	11,999	52,410	4,146
1978	26,718	14,878	5,086	46,682	14,011	60,693	4,646
1979	29,327	18,054	8,188	55,569	16,278	71,847	3,714
1980	29,986	19,750	10,029	59,764	17,367	77,131	3,836
1981	31,215	21,268	12,706	65,189	18,404	83,593	6,888
1982	34,322	20,558	12,977	67,857	19,139	86,996	15,204
1983	37,075	19,392	12,855	69,322	18,566	87,888	10,576
1984	37,619	18,092	13,740	69,450	17,640	87,090	8,428
1985	33,738	14,001	14,714	62,453	15,070	77,523	17,598
1986	29,678	10,317	14,425	54,420	12,143	66,563	19,190
1987	27,589	9,384	14,123	51,097	10,916	62,013	15,120
1988	28,309	8,766	12,899	49,974	11,760	61,734	8,902
1989	29,243	9,490	10,843	49,576	12,250	61,826	5,225
1990	31,267	9,699	9,374	50,341	12,740	63,081	4,377
1991P	32,299	9,830	9,539	51,668	12,985	64,653	4,000
Percent change in year							
1975	10.5	12.2	69.7	13.1	13.3	13.1	-23.7
1976	15.5	13.5	5.9	14.3	16.8	14.8	303.4
1977	10.4	10.1	67.3	12.9	22.6	15.0	342.9
1978	10.0	11.4	84.0	15.5	16.8	15.8	12.1
1979	9.8	21.3	61.0	19.0	16.2	18.4	-20.1
1980	2.2	9.4	22.5	7.6	6.7	7.4	3.3
1981	4.1	7.7	26.7	9.1	6.0	8.4	79.6
1982	10.0	-3.3	2.1	4.1	4.0	4.1	120.7
1983	8.0	-5.7	-0.9	2.2	-3.0	1.0	-30.4
1984	1.5	-6.7	6.9	0.2	-5.0	-0.9	-20.3
1985	-10.3	-22.6	7.1	-10.1	-14.6	-11.0	108.8
1986	-12.0	-26.3	-2.0	-12.9	-19.4	-14.1	9.0
1987	-7.0	-9.0	-2.1	-6.1	-10.1	-6.8	-21.2
1988	2.6	-6.6	-8.7	-2.2	7.7	-0.4	-41.1
1989	3.3	8.3	-15.9	-0.8	4.2	0.1	-41.3
1990	6.9	2.2	-13.5	1.5	4.0	2.0	-16.2
1991P	3.3	1.4	1.8	2.6	1.9	2.5	-8.6
Percentage distribution of debt							
1975	48.0	26.9	3.9	78.9	21.1	100.0	0.6
1976	48.3	26.6	3.6	78.5	21.5	100.0	2.1
1977	46.4	25.5	5.3	77.1	22.9	100.0	7.9
1978	44.0	24.5	8.4	76.9	23.1	100.0	7.7
1979	40.8	25.1	11.4	77.3	22.7	100.0	5.2
1980	38.9	25.6	13.0	77.5	22.5	100.0	5.0
1981	37.3	25.4	15.2	78.0	22.0	100.0	8.2
1982	39.5	23.6	14.9	78.0	22.0	100.0	17.5
1983	42.2	22.1	14.6	78.9	21.1	100.0	12.0
1984	43.2	20.8	15.8	79.7	20.3	100.0	9.7
1985	43.5	18.1	19.0	80.6	19.4	100.0	22.7
1986	44.6	15.5	21.7	81.8	18.2	100.0	28.8
1987	44.5	15.1	22.8	82.4	17.6	100.0	24.4
1988	45.9	14.2	20.9	81.0	19.0	100.0	14.4
1989	47.3	15.3	17.5	80.2	19.8	100.0	8.5
1990	49.6	15.4	14.9	79.8	20.2	100.0	6.9
1991P	50.0	15.2	14.8	79.9	20.1	100.0	6.2

P= Preliminary

Appendix table 4--Selected agricultural interest rates on nonreal estate loans, 1960-91

Nonreal estate								
Year	Commercial banks			Farm Credit System	FmHA		Average on farm nonreal estate 1/	Average on total farm debt 1/
	All banks	Large banks	Other banks		Regular	Limited resource		
Percent								
1960	6.80	NA	NA	7.25	5.00	NA	6.12	5.58
1965	6.70	NA	NA	6.58	5.00	NA	5.97	5.65
1970	8.32	NA	NA	9.45	6.88	NA	7.45	6.58
1975	9.03	NA	NA	9.11	8.63	NA	7.83	7.39
1980	15.20	16.20	15.00	12.74	11.00	6.82	11.11	9.58
1981	18.50	19.80	18.10	14.46	14.04	8.13	12.66	10.69
1982	16.70	16.10	17.00	14.58	13.73	10.75	12.61	11.01
1983	13.50	12.10	14.10	11.95	10.31	7.31	11.51	10.50
1984	14.10	13.10	14.40	12.47	10.25	7.25	11.25	10.31
I	13.50	12.20	14.10	12.05	10.25	7.25	NA	NA
II	14.20	13.30	14.50	12.10	10.25	7.25	NA	NA
III	14.80	14.40	14.90	12.61	10.25	7.25	NA	NA
IV	14.20	13.40	14.40	13.10	10.25	7.25	NA	NA
1985	12.80	11.20	13.40	12.40	10.25	7.25	10.13	9.55
I	13.21	1.70	13.80	12.91	10.25	7.25	NA	NA
II	13.00	11.50	13.60	12.50	10.25	7.25	NA	NA
III	12.30	10.60	12.90	12.16	10.25	7.25	NA	NA
IV	12.30	10.60	13.10	12.03	10.25	7.25	NA	NA
1986	11.50	9.60	12.10	11.22	8.66	5.66	10.18	9.56
I	12.00	10.30	12.80	11.40	10.25	7.25	NA	NA
II	11.50	9.70	12.00	11.25	8.71	5.71	NA	NA
III	11.40	9.30	12.10	11.25	8.00	5.00	NA	NA
IV	10.80	8.90	11.50	11.00	7.67	4.67	NA	NA
1987	10.60	9.20	11.30	10.20	8.12	5.27	10.67	9.73
I	10.10	8.40	11.20	10.10	7.50	4.50	NA	NA
II	10.70	9.40	11.20	10.00	7.50	4.50	NA	NA
III	10.40	9.30	11.10	10.00	8.75	5.57	NA	NA
IV	11.00	9.60	11.60	10.30	8.75	6.33	NA	NA
1988	11.20	10.20	11.60	10.56	9.02	6.02	11.74	10.50
I	11.00	9.70	11.60	10.48	9.00	6.00	NA	NA
II	10.70	9.70	11.30	10.51	8.67	5.67	NA	NA
III	11.50	10.70	11.80	10.43	9.00	6.00	NA	NA
IV	11.60	11.10	11.80	10.82	9.42	6.42	NA	NA
1989	12.50	12.10	12.70	11.73	9.10	6.10	10.95	10.06
I	12.33	12.10	12.40	11.63	9.40	6.40	NA	NA
II	12.90	12.80	13.00	12.11	9.50	6.50	NA	NA
III	12.50	12.00	12.80	11.55	9.00	6.00	NA	NA
IV	12.10	11.60	12.50	11.41	9.42	5.50	NA	NA
1990	11.50	10.95	12.28	11.16	8.81	5.81	10.30	9.95
I	11.80	11.20	12.30	11.20	8.50	5.50	NA	NA
II	11.80	11.40	12.30	11.20	8.50	5.50	NA	NA
III	10.90	10.20	12.30	11.14	9.25	6.25	NA	NA
IV	11.50	11.00	12.20	11.10	9.00	6.00	NA	NA
1991	9.80	9.10	11.30	10.30	8.44	5.00	9.9 P	9.7 P
I	10.40	9.60	11.60	10.71 P	9.00	5.00	NA	NA
II	9.80	9.10	11.50	10.39 P	8.25	5.00	NA	NA
III	10.10	9.40	11.50	10.24 P	8.25	5.00	NA	NA
IV	9.00	8.10	10.70	9.86 P	8.25	5.00	NA	NA

NA= Not available. P = Preliminary. 1/ Computed from data in Economic Indicators of the Farm Sector, 1986, USDA, ERS. Average interest rate on outstanding debt, excludes farm operator household interest and debt.

Appendix table 5--Selected agricultural interest rates on real estate loans, 1960-91 1/

Year	Prime Rate charged by banks	3-month Treasury bills	Real Estate				Average on farm real estate loans 2/
			Farm Credit System	Life insurance companies 1/	FmHA		
					Regular	Limited resource	
1960	4.82	2.95	6.00	5.00	5.00	NA	5.00
1965	4.54	3.95	5.60	5.50	5.00	NA	5.35
1970	7.91	6.44	8.68	9.31	5.00	NA	5.88
1975	7.86	5.82	8.69	10.03	5.00	NA	6.98
1980	15.27	11.61	10.39	13.21	11.05	4.82	8.17
1981	18.87	14.07	11.27	15.42	13.00	5.50	8.92
1982	14.86	10.72	12.27	15.51	12.94	6.50	9.58
1983	10.79	8.62	11.63	12.47	10.79	5.27	9.6
1984	12.04	9.57	11.76	13.49	10.75	5.25	9.48
I	11.07	9.13	11.50	13.04	10.75	5.25	NA
II	12.31	9.84	11.62	13.56	10.75	5.25	NA
III	12.99	10.34	11.79	13.71	10.75	5.25	NA
IV	11.80	8.97	12.14	13.65	10.75	5.25	NA
1985	9.93	7.49	12.24	12.60	10.75	5.25	9.06
I	10.54	8.18	12.24	12.88	10.75	5.25	NA
II	10.20	7.52	12.40	12.73	10.75	5.25	NA
III	9.50	7.10	12.40	12.50	10.75	5.25	NA
IV	9.50	7.15	12.40	12.34	10.75	5.25	NA
1986	8.33	5.97	11.61	11.95	9.13	5.06	9.05
I	9.37	6.89	11.90	12.78	10.75	5.25	NA
II	8.61	6.13	11.50	12.04	9.25	5.00	NA
III	7.85	5.53	11.10	11.80	8.25	5.00	NA
IV	7.50	5.34	11.95	11.20	8.25	5.00	NA
1987	8.22	5.82	11.10	10.21	8.90	5.00	9.96
I	7.50	5.53	11.40	9.48	8.25	5.00	NA
II	8.05	5.73	10.90	9.97	8.25	5.00	NA
III	8.40	6.03	10.75	10.50	9.25	5.00	NA
IV	8.92	6.11	11.50	10.88	9.83	5.00	NA
1988	9.32	6.69	10.10	10.32	9.46	5.00	9.46
I	8.60	5.76	9.88	10.13	9.50	5.00	NA
II	8.75	6.23	9.82	9.90	9.17	5.00	NA
III	9.67	6.99	10.06	10.08	9.50	5.00	NA
IV	10.17	7.69	10.56	10.07	9.67	5.00	NA
1989	10.88	8.12	10.93	10.78	9.46	5.00	9.36
I	11.00	8.53	10.82	10.71	9.50	5.00	NA
II	11.42	8.44	11.01	10.54	9.17	5.00	NA
III	10.58	7.85	10.62	10.23	9.50	5.00	NA
IV	10.50	7.64	10.65	10.40	9.67	5.00	NA
1990	10.00	7.51	10.56	10.34	8.94	5.00	9.65
I	10.00	7.60	10.62	9.62	8.75	5.00	NA
II	10.00	7.70	10.67	10.10	8.75	5.00	NA
III	10.00	7.49	10.49	10.30	9.25	5.00	NA
IV	10.00	7.02	10.45	10.97	8.75	5.00	NA
1991	8.48	5.41	9.88 P	9.66 P	8.81	5.00	9.5 P
I	9.19	6.05	10.22 P	10.00 P	9.00	5.00	NA
II	8.67	5.59	9.96 P	9.74 P	8.75	5.00	NA
III	8.40	5.41	9.89 P	9.67 P	8.75	5.00	NA
IV	7.67	4.58	9.46 P	9.24 P	8.75	5.00	NA

NA= Not available. P = Preliminary. 1/ Estimated by ERS from data obtained in a quarterly life insurance survey.
 2/ Computed from data in Economic Indicators of the Farm Sector, USDA, ERS. Average interest rate on outstanding
 debt, excludes farm operator household interest and debt.

Appendix table 6--Status of bank regulator Capital Forbearance Program, December 31, 1990 1/

Bank regulator 2/	Applicants	Denied	Withdrawn	Pending	Approved	Active	Banks terminated		
							Failure	Graduated	Other 3/
							Number		
FDIC	352	105	36	4	207	112	50	25	17
OCC	220	65	52	11	103	35	38	21	9
FRB	10	4	1	0	6	4	1	1	0

1/ Application deadline for program, program runs through January 1, 1995. 2/ Federal Deposit Insurance Corporation (FDIC), Office of the Comptroller of the Currency (OCC), Federal Reserve Board (FRB). 3/ Other includes mergers and/or charter conversions.

Source: Federal Deposit Insurance Corporation, Office of Supervision and Application. Internal Memorandum, Deputy Comptroller, Office of Special Supervision. Board of Governors Federal Reserve System, Office of Banking Supervision and Regulation.

Appendix table 7--Commercial bank real estate lending by type of bank, June 30, 1991

Bank group	Commercial banks	Real estate loans/ total loans	Nonperforming real estate/ total 1/ real estate 2/	Total nonperforming/ total loans	Nonperforming real estate/ total nonperforming	Weak banks 3/
		No.	Percent			No.
All	12,081	40.7	4.89	4.05	49.0	129
Agricultural	4,077	41.6	1.87	1.90	40.9	15
Small nonagricultural	7,384	55.2	2.22	2.26	54.3	101
Urban	5,459	39.7	5.35	4.32	49.1	96
Rural	6,622	49.3	1.76	1.84	47.4	33
Large nonagricultural	620	37.0	6.04	4.61	48.6	13

1/ RE = real estate. 2/ Ninety days past due and still accruing interest plus nonaccruals. 3/ Weak banks are banks with total nonperforming loans in excess of total capital.

Source: Report of Condition and Report of Income files, Board of Governors of the Federal Reserve System.

Appendix table 8--Banks reporting nonperforming loans greater than capital, 1983-91 1/

Year 2/	Agricultural banks		Nonagricultural banks		Total banks	
	Number	Pct.	Number	Pct.	Number	Pct.
1983	40	0.78	102	1.10	142	0.98
1984	93	1.86	94	1.00	187	1.30
1985	141	2.91	130	1.38	273	1.91
1986	158	3.36	230	2.47	388	2.77
1987	84	1.88	241	2.67	325	2.41
1988	54	1.25	238	2.76	292	2.30
1989	31	0.74	181	2.14	212	1.68
1990	13	0.32	130	1.58	143	1.17
1991	15	0.37	114	1.42	129	1.07

1/ Loans past due 90 days or more and still accruing interest plus loans in nonaccrual status are considered nonperforming. Total capital includes total equity capital plus allowance for loan and lease losses plus minority interest in consolidated notes and debentures. 2/ The 1991 numbers are as of June 30, all others are December 31.

Source: Calculated from the Report of Condition and Report of Income files, Board of Governors of the Federal Reserve System.

Appendix table 9--Commercial bank failures, 1980-91

Year	Agricultural banks		Nonagricultural banks		Total 1/ banks	
	Number	Pct. 2/	Number	Pct.	Number	Pct.
1980	0	0.00	10	0.11	10	0.07
1981	1	0.02	9	0.10	10	0.07
1982	10	0.19	23	0.25	33	0.23
1983	7	0.14	37	0.40	44	0.31
1984	31	0.62	47	0.50	78	0.54
1985	69	1.42	49	0.52	118	0.83
1986	66	1.41	78	0.84	144	1.03
1987	75	1.67	127	1.41	202	1.50
1988	41	0.95	180	2.09	221	1.71
1989	22	0.53	184	2.18	206	1.63
1990	18	0.44	141	1.76	159	1.30
1991	10	NA	98	NA	108	NA
Total	350	NA	970	NA	1,320	NA

NA=Not available. 1/ Totals exclude mutual savings banks, savings and loan associations, commercial banks not insured by the FDIC, and banks headquartered in U.S. possessions and territories. Failures are those declared insolvent and closed by their chartering authorities plus those granted open bank assistance by the FDIC. 2/ Failures as a percent of total banks of this type.

Source: Calculated from information provided by the Federal Deposit Insurance Corporation and the Report of Condition and Report of Income files, Board of Governors of the Federal Reserve System.

Appendix table 10--Changes in the number and composition of Farm Credit System associations, 1980-92 1/

Type	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Number								
Federal Land Bank Associations	491	437	388	232	232	154	146	95	85
Production Credit Associations	424	364	315	155	145	94	84	82	72
Agricultural Credit Associations	0	0	0	0	0	33	40	66	70
Federal Land Credit Associations	0	0	0	0	2	2	2	19	23
Total Associations	915	801	703	387	377	283	272	262	250

1/ Numbers of associations as of January 1, for each year except for 1991 which is reported as of April 1.

Source: FCA Bulletin and FCA Annual Report, various dates.

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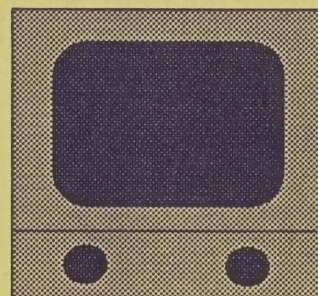
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